



# United States Department of the Interior



## BUREAU OF LAND MANAGEMENT

Dillon Field Office  
1005 Selway Drive  
Dillon, Montana 59725  
<http://www.mt.blm.gov/dfo>

1610.RMP

February 2006

Dear Reader/Interested Party:

I am pleased to announce that, after several years of collaborative effort, the Dillon Resource Management Plan (RMP) is complete. This document will provide guidance for the management of over 900,000 acres of public land and 1.3 million acres of Federal mineral estate administered by the Bureau of Land Management (BLM) in southwest Montana.

The attached Record of Decision (ROD) and RMP has been prepared in accordance with the Federal Land Policy and Management Act and the National Environmental Policy Act. The document has been sent to members of the public who requested a copy and to pertinent local, State, Tribal and Federal government entities. The ROD links final land use plan decisions to the proposed decisions and analysis presented in the Proposed RMP/Final Environmental Impact Statement (FEIS) that was released in April 2005 and subject to a 30-day protest period that ended on May 31, 2005. Seven protest letters were received. The protests were reviewed by the BLM Assistant Director, Renewable Resources and Planning, in Washington, D.C. After careful consideration of all points raised in these protests, the Assistant Director concluded the responsible planning team and decision makers followed all applicable laws, regulations, policies, and pertinent resource considerations in developing the proposed plan. Minor adjustments or points of clarification incorporated into the RMP in response to issues raised in the protest process and final BLM review are discussed in the ROD under the sections titled *Notice of Modification* and *Clarifications*, but the protest review did not result in any significant changes to the proposed plan.

This ROD serves as the final decision for the land use planning decisions described in the attached Approved RMP. However, the ROD also contains route designations described and mapped as part of the travel management included in the RMP. Route designations are implementation level decisions. Therefore, an appeal opportunity under the Department of Interior's appeal regulations at 43 CFR Part 4 is being provided at this time for the route designations proposed within the RMP. The appeal period will close 30 days from the date the Notice of Availability of the ROD/RMP appears in the *Federal Register*. This date will also be announced via local news releases, on the Dillon RMP website (if operational), and by newsletter mailings. Please review the *Implementation Decisions* section in the ROD carefully for a more detailed discussion of the appeal process.

Additional hard copies and CD-ROM versions of the RMP/ROD may be obtained by contacting the Dillon Field Office at the address above. The document will also be available on the internet at <http://www.mt.blm.gov/dfo/rmp> if and when court orders allow public access to Department of Interior websites.

We are pleased to provide this copy of the Dillon RMP for your reference and extend our appreciation for your cooperation and assistance during this planning process. We look forward to your continued participation as the plan is implemented.

Sincerely,

Tim Bozorth  
Dillon Field Manager

**RECORD OF DECISION  
AND  
APPROVED  
DILLON RESOURCE MANAGEMENT PLAN**

February 2006

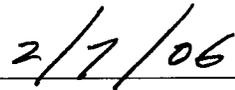
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Date

## TABLE OF CONTENTS

<b>Acronyms/Abbreviations</b> .....	v
-------------------------------------	---

### **RECORD OF DECISION**

Introduction .....	1
Results of Protest Review .....	3
Decision .....	3
What the Decision/RMP Provides .....	4
What the Decision/RMP Does Not Provide .....	4
Implementation Decisions .....	5
Notice of Modifications .....	5
Clarifications .....	6
Overview of the Alternatives .....	7
The Environmentally Preferred Alternative .....	8
Management Considerations in Selecting the Approved Plan .....	8
Mitigation Measures .....	10
Plan Monitoring .....	10
Public Involvement .....	11
Availability of the Plan .....	11
Recommendation and Approval .....	11

### **APPROVED RMP**

Introduction .....	13
Vision .....	13
Consideration of Other BLM Plans and Policies .....	13
Plan Implementation .....	14
General Implementation Schedule of “One-Time” Actions .....	14
Implementation Updates .....	14
Maintaining the Plan .....	15
Changing the Plan .....	15
Plan Evaluation and Adaptive Management .....	15
Plan Evaluation .....	15
Adaptive Management .....	15
Management Decisions .....	17
Abandoned Mine Lands .....	17
Air Quality .....	17
Areas of Critical Environmental Concern (ACECs) .....	17
Beaverhead Rock ACEC .....	19
Block Mountain ACEC .....	20
Blue Lake ACEC .....	20
Centennial Mountains ACEC .....	22
Everson Creek ACEC .....	22
Muddy Creek/Big Sheep Creek ACEC .....	23
Virginia City Historic District ACEC .....	24
Back Country Byways .....	24
Cultural Resources .....	24
Economic Conditions .....	26
Environmental Justice .....	27
Fire and Fuels Management .....	27
Fish and Special Status Fish .....	29
Forest and Woodland Vegetation and Forest Products .....	31

Geologic Resources .....	35
Hazardous Materials .....	35
Indian Trust Resources .....	36
Lands and Realty .....	36
Land Use Authorizations .....	36
Land Ownership Adjustment .....	38
Access .....	40
Withdrawals .....	41
Livestock Grazing .....	41
Minerals .....	43
Leasable .....	43
Locatable .....	46
Saleable/Mineral Materials .....	48
National Trails .....	48
Noxious Weeds, Invasive, and Non-Native Species .....	49
Paleontological Resources .....	50
Rangeland Vegetation .....	50
Recreation .....	51
Renewable Energy .....	54
Riparian and Wetland Vegetation .....	55
Social Conditions .....	57
Soils .....	57
Special Status Plants .....	57
Transportation and Facilities .....	59
Travel Management and OHV Use .....	60
Tribal Treaty Rights .....	63
Utility and Communication Corridors .....	63
Vegetation (see Forest and Woodland, Invasive Species, Rangeland or Riparian and Wetland Vegetation sections)	
Visual Resources .....	65
Water .....	66
Wild and Scenic Rivers .....	67
Wild Horses and Burros .....	67
Wilderness .....	67
Wilderness Study Areas .....	67
Wildlife and Special Status Birds and Mammals .....	68
<b>List of Preparers</b> .....	<b>75</b>
<b>References Cited</b> .....	<b>77</b>
<b>Glossary</b> .....	<b>79</b>
<b>List of Tables</b>	
Table 1: Surface Ownership/Administration of Lands in Beaverhead and Madison Counties .....	1
Table 2: Federal Minerals within the Dillon Field Office included in RMP Decisions .....	3
Table 3: Summary of Management Constraints in ACECs .....	18
Table 4: Communication Sites, Locations and Designated Use Categories .....	36
Table 5: Oil and Gas Lease Terms and Stipulations .....	44
Table 6: Recreational Emphasis by Special Recreation Management Area .....	53
Table 7: Communication Sites, Locations and Designated Use Categories .....	64
Table 8: Visual Resource Management Class Objectives .....	65
<b>List of Figures</b>	
Figure 1: Four Step Implementation Process .....	16
Figure 2: Relationship of Wildfire, Prescribed Fire, and Wildland Fire Use as part of overall Wildland Fire .....	27
Figure 3: Forest Structure Distribution of Major Species Groups in the Planning Area .....	32

## List of Appendices

Appendix A:	Western Montana Standards for Rangeland Health and Guidelines for Livestock Grazing .....	97
Appendix B:	Best Management Practice References .....	105
Appendix C:	Cultural Resource Use Categories .....	107
Appendix D:	Fire Management Zone Descriptions .....	109
Appendix E:	Emergency Stabilization and Rehabilitation Procedures after Wildland Fire .....	117
Appendix F:	Biological Evaluation Form .....	121
Appendix G:	Conservation Actions for Westslope Cutthroat Trout .....	127
Appendix H:	Acquisition Criteria .....	129
Appendix I:	Public Lands Available for Disposal (Category 3) .....	131
Appendix J:	Existing Withdrawal Descriptions .....	133
Appendix K:	Oil and Gas Stipulations and Lease Notices .....	137
Appendix L:	Bureau of Reclamation Lease Notice and Stipulations .....	151
Appendix M:	Procedures in Oil and Gas Recovery .....	155
Appendix N:	Standard Operating Procedures for Mineral Material Sites .....	169
Appendix O:	BLM Road and Trail Maintenance Levels .....	171
Appendix P:	Motorized Route Designation Principles .....	173
Appendix Q:	Management of Wilderness Study Areas if Released .....	175
Appendix R:	Migratory Bird Conservation .....	177
Appendix S:	Threatened or Endangered Species Screening Process .....	179
Appendix T:	Bald Eagle Project Screening Elements and Determinations .....	181
Appendix U:	Gray Wolf Project Screening Elements and Determinations .....	185
Appendix V:	Grizzly Bear Management .....	187
Appendix W:	Lynx Management .....	197
Appendix X:	Sage Grouse Management .....	207
Appendix Y:	Tentative Implementation Schedule .....	221
Appendix Z:	Plan Maintenance Roster .....	225
Appendix AA:	Plan Monitoring Roster .....	227

## List of Maps

With the exception of Map 1 on page 2, all maps are included at the back of the document

Map 1:	General Location of the Planning Area
Map 2:	Land Status in the Planning Area (oversize)
Map 3:	Designated ACECs
Map 4:	Beaverhead Rock ACEC
Map 5:	Block Mountain ACEC
Map 6:	Blue Lake ACEC
Map 7:	Centennial Mountains ACEC
Map 8:	Centennial Sandhills ACEC
Map 9:	Everson Creek ACEC
Map 10:	Muddy Creek/Big Sheep Creek ACEC
Map 11:	Virginia City Historic District ACEC
Map 12:	Back Country Byways and National Trails
Map 13:	Fire Management Zones and Category Designations
Map 14:	Class I (Blue Ribbon), Westslope Cutthroat Trout, and Arctic Grayling Streams (oversize)
Map 15:	Priority Treatment Areas and Vegetation Habitat Types (oversize)
Map 16:	Existing and Proposed Withdrawal Areas (oversize)
Map 17:	Designated Utility Corridors and Use Areas, Existing Communication Sites, and Right-of-Way Avoidance and Exclusion Areas
Map 18:	Land Adjustment Category Designations (oversize)
Map 19:	Grazing Availability and Allotments (oversize)
Map 20:	Watershed Assessment Schedule
Map 21:	Oil and Gas Leasing Availability (oversize)
Map 22:	Mineral Material Areas
Map 23:	Special Recreation Management Areas (SRMAs)
Map 24:	Developed Recreation Sites

Map 25:	Outfitter Permit Areas (OPAs)
Map 26:	Motorized Route Designations—East Half (oversize)
Map 27:	Motorized Route Designations—West Half (oversize)
Map 28:	Areas Closed to Motorized Travel
Map 29:	Snowmobile Restrictions
Map 30:	Visual Resource Management (VRM) Designations
Map 31:	Designated Wilderness and Wilderness Study Areas
Map 32:	Raptor Management Areas
Map 33:	Wildlife Dispersal/Migration Corridors
Map 34:	Grizzly Bear Areas
Map 35:	Bighorn Sheep Occupied Habitat
Map 36:	Centennial Valley Wetland and Waterfowl Production Areas

## ACRONYMS

ACEC	Area of Critical Environmental Concern	MCA	Montana Code Annotated
AML	Abandoned Mine Lands	MCC	Montana Consensus Council
AMP	Allotment Management Plan	MCF	Thousand Cubic Feet
ARS	Agricultural Research Service	MFP	Management Framework Plan
AUM	Animal Unit Month	MIST	Minimum Impact Suppression Tactics
BCR	Bird Conservation Region	MMBF	Million Board Feet
BDNF	Beaverhead-Deerlodge National Forest	MMCF	Million Cubic Feet
BFO	Butte Field Office	MOU	Memorandum of Understanding
BLM	Bureau of Land Management	MRWA	Montana Riparian-Wetland Association
BMP	Best Management Practice	NE	No Effect
BOR	Bureau of Reclamation	NEPA	National Environmental Policy Act
C&MU	Classification and Multiple Use	NF	Non Functional
CDT	Continental Divide Trail	NLAA	Not Likely to Adversely Affect
CEQ	Council on Environmental Quality	NOI	Notice of Intent
CFR	Code of Federal Regulations	NPS	National Park Service
CRMW	Center for the Rocky Mountain West	NRCS	Natural Resources and Conservation Service (formerly Soil Conservation Service)
DEQ	Department of Environmental Quality	NRHP	National Register of Historic Places
DFC	Desired Future Condition	NWR	National Wildlife Refuge
DFO	Dillon Field Office	OHV	Off-highway vehicle
DNRC	Department of Natural Resources Conservation	OPA	Outfitter Permit Area
DOI	Department of the Interior	ORV	Outstandingly remarkable value
EE/CA	Engineering Evaluation/Cost Analysis	PFC	Proper Functioning Condition
EIS	Environmental Impact Statement	PRP	Potentially Responsible Party
EO	Executive Order	PSQ	Probable Sale Quantity
EPA	Environmental Protection Agency	R&PP	Recreation and Public Purposes
ESA	Endangered Species Act	RAC	Resource Advisory Council
ESR	Emergency Site Rehabilitation	RMP	Resource Management Plan
FACA	Federal Advisory Committee Act	ROD	Record of Decision
FAR	Functioning-at-Risk	ROW	Right-of-way
FLPMA	Federal Land Management Policy Act	SHPO	State Historic Preservation Office
FMZ	Fire Management Zone	SMZ	Streamside Management Zone
FO	Field Office	SO	State Office
FORVIS	Forest Vegetation Inventory System	SRMA	Special Recreation Management Area
FS	Forest Service	SSS	Special Status Species
FTE	Full Time Equivalent	TMDL	Total Maximum Daily Load
FWP	Fish, Wildlife and Parks	USDA	United States Department of Agriculture
HMP	Habitat Management Plan	USDI	United States Department of the Interior
IB	Information Bulletin	USFWS	United States Fish and Wildlife Service
IDT/ID Team	Interdisciplinary Team	VRM	Visual Resource Management
IGBC	Interagency Grizzly Bear Committee	WCT	Westslope Cutthroat Trout
IM	Instruction Memorandum	WFSA	Wildland Fire Situation Analysis
IMP	Interim Management Policy (for WSAs)	WMZ	Western Montana Zone
KGRA	Known Geothermal Resource Area	WO	Washington Office
LAA	Likely to Adversely Affect	WSA	Wilderness Study Area
LAU	Lynx Analysis Unit	WUI	Wildland Urban Interface
LWCF	Land and Water Conservation Fund	WQRP	Water Quality Restoration Plan
MBF	Thousand Board Feet		
MBMG	Montana Bureau of Mines and Geology		

# RECORD OF DECISION

## INTRODUCTION

This Record of Decision (ROD) approves the Bureau of Land Management's (BLM's) proposal to manage the public lands within the Dillon Field Office as presented in the attached Resource Management Plan (RMP). This RMP was described as Alternative B in the April 2005 Proposed Dillon Resource Management Plan and Final Environmental Impact Statement (USDI-BLM 2005a). This ROD provides the background on development of the plan and rationale for approving the proposed decisions contained in Alternative B, and describes the clarifications and/or modifications made to address protests received on the plan. The attached RMP (referred to as the Approved Plan) describes the decisions themselves.

The planning area lies in the extreme southwest corner of Montana, bounded on the south and west by the State of Idaho and the Continental Divide (see Map 1). The area is rural in nature, with small communities scattered throughout Beaverhead and Madison Counties, and experiences a continental climate of cold, relatively dry winters and warm, dry summers. This type of cool, dry climate gives rise to sagebrush-grassland communities in the valleys and forests at higher elevations. Elevations range from 4,500 feet to 11,154 feet, with several distinct mountain ranges spanning

the area, including the Beaverhead Mountains, the Black-tails, the Centennials, the Tendoy, the Gravellys, the Pioneers, the Rubys, the Madison, the Tobacco Roots, and the Highlands. Most of the planning area receives 8 to 16 inches of precipitation annually, with most coming in May and June. Springs that form the uppermost reaches of the entire Missouri River drainage are located on BLM lands administered by the Dillon Field Office, and the renowned Beaverhead, Big Hole, and Madison Rivers drain the planning area.

Decisions in the Approved Plan apply to just over 900,000 acres of public land surface estate and about 1.3 million acres of federal subsurface mineral estate. This includes:

- all surface estate administered by the BLM's Dillon Field Office
- federal mineral resources managed by the BLM beneath private or State surface estate
- federal mineral estate lying beneath lands administered by the Bureau of Reclamation
- federal mineral estate lying beneath lands administered by the Agricultural Research Service

Tables 1 and 2 summarize the ownership and administration of surface and subsurface estate in the planning area. Map 2 (oversized) depicts the land status in the planning area.

**Table 1**  
**Surface Ownership/Administration of Lands in Beaverhead and Madison Counties**

<i>Ownership/Administration</i>	<i>Beaverhead County</i>		<i>Madison County</i>	
	<i>Acres</i>	<i>Percent*</i>	<i>Acres</i>	<i>Percent*</i>
BLM Dillon Field Office	651,504	18%	249,846	11%
BLM Butte Field Office	12,380	<1%	0	0
U.S. Forest Service	1,373,748	39%	807,529	35%
U.S. Fish and Wildlife Service	39,231	1%	167	<1%
U.S. National Park Service	675	<1%	0	0
U.S. Agricultural Research Service	15,538	<1%	0	0
U.S. Bureau of Reclamation	4,749	<1%	0	0
State of Montana—FWP	29,918	<1%	23,916	1%
State of Montana—DNRC	325,374	9%	127,143	5%
Private	1,077,179	30%	1,085,733	47%
Other	16,479	<1%	8,611	<1%
<b>GRAND TOTAL</b>	<b>3,546,775</b>	<b>100%</b>	<b>2,302,945</b>	<b>100%</b>

\*Percentages rounded to nearest one percent.



### General Location of the Planning Area

Map shows the general location of the BLM's Dillon Field Office in relation to southwest Montana, Idaho and Wyoming.

US DEPARTMENT OF THE INTERIOR  
Bureau of Land Management  
**Dillon Field Office**  
**Resource Management Plan**



Albers Equal Area, NAD83

This map is intended for display purposes. No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data, or for purposes not intended by BLM. This map may not meet National Map Accuracy Standards. This product was developed through digital means and information may be updated without notification.

February 2006

**Map 1**

**Table 2**  
**Federal Minerals within the Dillon Field Office included in RMP Decisions**

<i>Type of Jurisdiction</i>	<i>Beaverhead County</i>	<i>Madison County</i>	<i>Total Acres</i>
BLM Surface and Federal Minerals	645,015	248,785	893,800
Private and State Surface and Federal Minerals	277,128	167,431	444,559
BOR Surface and Federal Minerals	1,305	0	1,305
ARS Surface and Federal Minerals	15,538	0	15,538
<b>GRAND TOTAL</b>	<b>938,986</b>	<b>416,216</b>	<b>1,355,202</b>

Development of this RMP was formally initiated with publication of a Notice of Intent in the *Federal Register* on August 9, 2001. Over the next four years, BLM conducted extensive public outreach, and initiated a number of collaborative efforts involving diverse interests as part of plan development (these opportunities are summarized in the *Public Involvement* section below and fully described on pages 373-377 of the Proposed RMP/Final EIS). BLM also provided standard public comment periods and an opportunity to protest the proposed decisions to the Director prior to approval of this ROD as required by the BLM planning regulations.

## RESULTS OF PROTEST REVIEW

BLM received seven protest letters during the 30-day protest period provided for the proposed land use plan decisions contained in the Dillon Proposed RMP/Final EIS in accordance with 43 CFR Part 1610.5-2. Protesting parties included:

- Greater Yellowstone Coalition and American Wildlands
- Beaverhead County Board of Commissioners and Madison County Board of Commissioners
- Bob Briggs
- Larry Reuber
- Southwest Montana Stockman's Association
- The Wilderness Society
- Public Lands/Water Access Association, Skyline Sportsmen, and Coalition for State Public Lands

Main protest points pertained to ACEC issues and management, (including the Blacktail Wildlife Linkage ACEC nomination and appropriate management of designated ACECs), special status species management, the plan's adequacy in protecting wilderness values, consistency issues, adequacy of data used in development of the plan, monitoring requirements, road closures, previous Wilderness Study Area designations, application of sage grouse guidelines, Standards and Guidelines implementation, application of a residual

emergent wetland vegetation standard in the Centennial Valley, the range of alternatives considered in the EIS (especially regarding travel planning), whether the EIS adequately disclosed impacts to various programs and resources, disproportionate impacts to Madison and Beaverhead Counties, adequacy of public involvement, whether comments by the public were adequately considered, and compliance with the Federal Advisory Committee Act (FACA), the Federal Land Management and Policy Act, the Unlawful Inclosures Act, the Fraud and False Statements Act, the Federal Data Quality Act, the Administrative Procedures Act, and the National Environmental Policy Act.

The BLM Director addressed all protests without making significant changes to the Proposed Resource Management Plan, though minor adjustments and clarifications were made and have been explained in this ROD. The *Notice of Modification* and *Clarification* sections below describe these clarifications and adjustments.

## DECISION

The decision is hereby made to approve the attached plan as the Approved Resource Management Plan (RMP) for public lands located in Beaverhead and Madison Counties that are administered by Montana's Dillon Field Office (see Map 2, oversized). The Approved Plan replaces the Dillon Management Framework Plan (MFP) approved in September 1979 (USDI-BLM 1979).

This plan was prepared under the regulations (43 CFR Part 1600) implementing the Federal Land Policy and Management Act (FLPMA) of 1976. An Environmental Impact Statement (EIS) was prepared for this RMP in compliance with the National Environmental Policy Act (NEPA) of 1969. Management decisions and guidance for public lands under the jurisdiction of the Dillon Field Office are presented in the Approved Plan attached to this ROD in the section titled *Management Decisions*.

All decisions covered by this ROD are land use planning decisions which were protestable under the land use planning regulations (43 CFR Part 1610) *with the exception of the route designations for motorized wheeled travel in the planning area*. The route designation decisions are implementation decisions which may be appealed under the Department of Interior's appeal regulations (43 CFR Part 4). Information on how to appeal the route designation decisions can be found in the *Implementation Decisions* section below.

## What the Decision/RMP Provides

Land use plan decisions include:

- Goals
- Objectives (Desired Future Conditions)
- Land Use Allocations
- Management Actions

**Goals** are the broad statements of desired outcomes, and are usually not quantifiable. **Objectives** are specific desired conditions, usually quantifiable and measurable, and may have timeframes for achievement. **Land use allocations** specify locations within the planning area that are available or not for certain uses. These include decisions such as what lands are available for livestock grazing, mineral material use, oil and gas leasing, and locatable mineral development, what lands may be available for disposal via exchange and/or sale, and what lands are open, closed, or limited to motorized travel (please note that all acreages presented in the Approved Plan are estimations even when presented to the nearest acre). **Management actions** include those provisions that help in meeting the established goals and objectives and include measures that will be applied to guide day-to-day activities on public lands, including but not limited to stipulations, guidelines, best management practices (BMPs), and design features.

The primary management decisions in the Approved Plan are to:

- Manage resources to protect and enhance vegetative communities, fish and wildlife resources, natural, cultural, geological and paleontological resources, recreational opportunities, and wilderness resources.
- Manage uses to protect and prevent damage to public land resources, and to enhance those resources where feasible.
- Designate eight Areas of Critical Environmental Concern (ACECs) and manage according to the special management prescriptions identified for each area.
- Conduct proactive cultural resource inventories under Section 110 of the National Historic Preservation Act.
- Place BLM-administered lands in fire management categories.
- Designate 826,876 acres as limited to off-highway vehicle use and 74,350 acres as closed to off-highway

vehicle use. No areas in the planning area are designated as open.

- Make an estimated 852,778 acres of the 900,000 acre planning area available for livestock grazing as long as the *Western Montana Standards for Rangeland Health* can continue to be met.
- Make an estimated 1.2 million acres of the 1.3 million acres of federal mineral estate available for oil and gas leasing. Approximately 145,554 acres are unavailable for oil and gas leasing. An estimated 143,420 acres are available for oil and gas leasing under standard lease terms; an estimated 632,061 acres are available subject to Controlled Surface Use or Timing Limitation stipulations; and an estimated 433,797 acres are available subject to No Surface Occupancy (NSO) stipulations.
- Withdraw approximately 5,000 acres from locatable mineral entry.
- Designate nine Special Recreation Management Areas (SRMAs), with one additional SRMA designated if the Henneberry Ridge WSA is released.
- Highlight and interpret the Big Sheep Creek Back Country Byway.
- Continue to manage the Bear Trap Wilderness under the wilderness plan prepared for it, and manage the nine Wilderness Study Areas in accordance with the *Interim Management Policy for Lands Under Wilderness Review* unless released by Congress.
- Release the 860 acres of public land within the Tobacco Root Tack-on WSA studied under Section 202 from further consideration as wilderness because it is too small to be considered for wilderness on its own, and no longer complements management of adjacent lands managed by the Beaverhead-Deerlodge National Forest. Manage the area consistent with adjacent lands and in consideration of other land use plan provisions.
- Manage approximately 4,000 acres of the 900,000 acre planning area for potential disposal through land adjustment actions (Category 3), with the remainder managed for retention (Category 1) or retention with limited adjustment (Category 2).

This ROD serves as the final decision establishing the land use plan decisions outlined in the Approved Plan and is effective on the date it is signed. No further administrative remedies are available for these land use plan decisions.

## What the Decision/RMP Does Not Provide

The Approved Plan does not contain decisions for the surface or mineral estates of land administered by the BLM Butte Field Office (but located in Beaverhead County), for USDA Forest Service lands located in Beaverhead and Madison Counties, for lands under the jurisdiction of the USDI Fish and Wildlife Service, or for private or State-owned lands and minerals.

In addition, many decisions are not appropriate at this level of planning and are not included in the ROD. Examples of these types of decisions include:

*Statutory requirements.* The decision will not change the BLM's responsibility to comply with application laws and regulations.

*National policy.* The decision will not change BLM's obligation to conform with current or future National policy.

*Funding levels and budget allocations.* These are determined annually at the National level and are beyond the control of the field office.

## Implementation Decisions

While the designation of areas as open, closed, or limited to off-highway vehicle use is a land use planning decision, the proposed route designations for motorized wheeled travel in the planning area included in the Proposed RMP/Final EIS are implementation decisions which are now appealable under the Department of Interior's appeal regulations (43 CFR Part 4). These procedures are summarized below.

The route designations described in the *Travel Management and OHV Use* section of the Approved RMP and identified on Maps 26 and 27 are effective upon issuance of this Record of Decision, unless a stay of the decision is granted. In accordance with 43 CFR Part 8342.3(b) public notice was provided with publication of a *Federal Register* Notice of Availability of the Proposed RMP/Final on April 29, 2005, and with publication of the *Federal Register* notice announcing the availability of this Record of Decision and Approved Plan.

### ***Appeal Procedures for Implementation Decisions***

Any party adversely affected by the proposed route designations may appeal within 30 days of receipt of this decision in accordance with the provisions of 43 CFR Part 4.4. The publication of the Notice of Availability of the ROD/Approved Plan will be considered the date the decision is received. The appeal should state the specific route(s) by township, range and section on which the decision is being appealed. The appeal must be filed with the Field Manager, at the following address:

Bureau of Land Management  
Dillon Field Office  
1005 Selway Drive  
Dillon, Montana 59725

You may include a statement of reasons when the notice of appeal is filed, or you may file the statement of reasons

within 30 days after filing the appeal. A copy of the appeal, statement of reasons, and all other supporting documents must also be sent to the Field Solicitor, U.S. Department of the Interior, P.O. Box 31394, Billings, Montana 59107-1394.

If the statement of reasons is filed separately, it must be sent to the Interior Board of Land Appeals, Office of Hearings and Appeals, 801 N. Quincy Street, Suite 300, Arlington, VA 22203. It is suggested that any appeal be sent certified mail, return receipt requested.

### ***Request for Stay***

If you wish to request a stay of the decision pending the outcome of the appeal, the motion for stay must be filed in the office of the authorized officer at the time the appeal is filed and must show sufficient justification based on the following standards under 43 CFR Part 4.21:

- (1) The relative harm to the parties if the stay is granted or denied.
- (2) The likelihood of the appellant's success on the merits.
- (3) The likelihood of immediate and irreparable harm if the stay is not granted.
- (4) Whether the public interest favors granting the stay.

## Notice of Modifications

As a result of protests on the Proposed Plan and continued internal review, BLM made two modifications to the Proposed Plan. As described below, these modifications are not considered significant changes. The *Management Decisions* section of the attached Approved Plan includes these modifications.

### Centennial Valley Wetland and Waterfowl Areas and Management

To resolve one protest point, BLM modified one management action designed to protect relevant and important waterfowl values in the Centennial Valley wetland and waterfowl area. The Proposed RMP/Final EIS stated that grazing would be managed to provide a minimum of 12-inch tall residual emergent wetland vegetation within wetland and waterfowl production areas in the Centennial Valley. After review, BLM found that this specific height requirement alone may not necessarily ensure the desired result of protecting relevant and important values and does not meet BLM policy guidance on the types of management included in land use plans. The adjusted management reads:

*Manage the density and height of emergent wetland vegetation (cattails, rushes, etc.) to provide residual nesting cover and concealment for trumpeter swans and other waterfowl within the wetland and waterfowl production areas in the Centennial Valley (see Map 36).*

This modification is reflected in the *Livestock Grazing, Riparian and Wetland Vegetation*, and *Wildlife* sections in the attached Approved Plan.

This adjustment is not considered a significant change since the area will still be managed to protect the relevant and important values in the area and the effects of managing these lands to protect these values were adequately projected in the Proposed RMP/Final EIS released in April 2005. In addition, watershed assessment work completed in the Centennial Valley in 2004 indicates that current conditions are providing adequate habitat for waterfowl in most areas in the valley (USDI-BLM 2005b, 2005c). Management has been revised in any areas where concerns with adequate waterfowl habitat were identified in the recently released Centennial Watershed Decision (USDI-BLM 2005c, 2005d). The Centennial Watershed Decision also contains a monitoring plan as well as a provision to create exclosures to protect wetland and waterfowl values if monitoring shows impacts are occurring to those values as a result of management in the area. Finally, additional consideration of the area is given in the Red Rock Waterfowl Habitat Management Plan which will be updated and revised as part of implementation actions identified in the Dillon RMP.

#### Use Levels for Outfitted Big Game Hunting

The Proposed RMP/Final EIS included specific use levels for outfitted big game hunting for seven Outfitter Permit Areas (OPAs). These use levels were derived from the average reported use between 1990 and 2001 for all outfitters operating within those areas (or the total annual average if use was less than the full 10-year period). Following publication of the Proposed RMP, further internal review revealed that wide year-to-year variations in use numbers may have resulted in 10-year averages that are below client use totals during "good" years. BLM is still committed to managing outfitted big game hunting use within historic levels, but intends to consult more closely with those who will be affected by the eventual allocation of maximum permitted use levels to more accurately understand historic use levels and trends. BLM will establish the use levels by OPA after consultation with outfitters operating in those areas within two years of issuance of this ROD. This adjustment is not considered a significant change since the approach of managing within historic levels will be maintained.

## Clarifications

The following clarifications and minor corrections made to the information included in the Proposed RMP/Final EIS are reflected in the attached Approved Plan:

- Management in the Centennial Mountains ACEC was clarified to state that all proposed activities would be evaluated to ensure protection of relevant and important values, though winter recreation activities and the potential for backcountry helicopter use were identified specifically as threats.
- Pale evening primrose was removed from the description of plants of concern in the Centennial Sandhills ACEC; the species is no longer included on the Montana/Dakotas list of special status plant species.
- Terminology in the *Fire Management* section was adjusted to be consistent with interagency federal wildland fire policy and related documents developed by the National Fire and Aviation Executive Board. As a result, the section is organized differently than in the Proposed RMP/Final EIS, but contains the same goals, objectives, allocations, and management actions.
- A management action in the *Fish* section was clarified; language was included to specify that any increase of large woody debris in deficient streams is for the purpose of improving pool and spawning habitat.
- A *Mineral Materials* decision that prohibited disposal of mineral materials from mining claims was adjusted to allow disposal of mineral material with the claimant's consent. BLM will not consider disposal without consent under this RMP, even though regulations now provide a process to allow it, since those impacts were not analyzed in the Proposed RMP/Final EIS.
- The *National Trails* section was clarified; a new agreement with appropriate agencies will be prepared to clearly define management responsibilities along the Continental Divide National Scenic Trail, rather than assuming that previous formal or informal commitments continue to be valid.
- An action in the *Rangeland Vegetation* and *Wildlife including Special Status Species* sections was clarified to focus management on preventing loss of Basin big sagebrush and Wyoming big sagebrush stringer habitat by mechanical damage or other actions.
- The *Recreation* section was clarified to indicate that the Centennial Mountain, East Fork Blacktail Creek and Ruby Mountain areas are all priorities for non-motorized trail work.
- Management in the *Riparian Vegetation* section was clarified to specify that use of chainsaws will be allowed where other mechanized equipment is restricted when conducting riparian restoration work.
- The Fire Management Zone boundaries shown on Map 13 were adjusted to show the correct boundaries between the Beaverhead Mountains, Pioneer Mountains, and Southeast Foothills/Pioneers Fire Management Zones. A description of the Pioneer Mountains FMZ

was also added to Appendix D, and acreage calculations were updated based on the most current information. However, none of the category designations were changed.

- The map depicting BLM lands unavailable for livestock grazing (Map 19) was updated. Corrections were made to allotment boundaries and the map now also depicts unleased lands that will be evaluated during watershed assessments, totaling approximately 13,759 acres. The acreage of unavailable lands was updated from an estimated 48,448 acres to an estimated 47,837 acres as a result of map corrections.
- Existing mineral material site locations shown on Map 22 were updated with the most current information.
- Special Recreation Management Area (SMRA) boundaries shown on Map 23 were corrected to include BLM lands inadvertently omitted in the Proposed RMP/Final EIS.
- The boundary of the Centennial Valley Wetland and Waterfowl Areas shown on Map 36 where management to provide for waterfowl nesting and concealment will be applied were corrected to include the Mud Lake area and follow a BLM ownership line inadvertently omitted.
- Two legal locations were corrected in Appendix I which describes potential disposal tracts.

## OVERVIEW OF THE ALTERNATIVES

Four alternatives, including a No Action Alternative were analyzed in detail in the Draft RMP/EIS (USDI-BLM 2004a) and in the Proposed RMP/FEIS (USDI-BLM 2005a). The alternatives were developed to address major planning issues and to provide direction for resource programs influencing land management. All alternatives incorporated the *Western Montana Standards for Rangeland Health* developed in conjunction with the Western Montana Resource Advisory Council (RAC) as base standards for assessing land health. All management under any of the alternatives would comply with state and federal regulations, laws, standards, and policies.

Each alternative emphasizes a different combination of resource uses, allocations, and restoration measures to address issues and resolve conflicts among uses, so program goals are met in varying degrees across the alternatives. However, each alternative allows for some level of support of all resources present in the planning area. The alternatives dif-

fer in how fast the goal would be met, the degree to which it would be met, the emphasis placed on certain programs and activities, and whether active or passive management would occur. Management scenarios for programs not tied to major planning issues and/or mandated by law often contain few or no differences in management between alternatives.

**Alternative A** is the continuation of present management, also called the No Action Alternative. This alternative would continue present management practices based on existing land use plans and other management decision documents. Valid decisions contained in the Dillon Management Framework Plan would be implemented if not already completed. Direction contained in existing laws, regulation and policy would also continue to be implemented, sometimes superseding provisions of the Dillon MFP. The current levels, methods and mix of multiple use management of public land in the planning area would continue, and resource values would receive attention at present levels. In general, most activities would be analyzed on a case-by-case basis and few uses would be limited or excluded as long as land health standards could be met.

**Alternative B** emphasizes a moderate level of protection, use, restoration, and enhancement of resources and services. Constraints to protect resources would be implemented, but would be less restrictive than under Alternative C. Alternative B would accommodate a higher level of production of food, fiber, minerals and services through the use of public land than Alternative C, though to a lesser degree than Alternative D. Resource values and fish and wildlife habitats would be restored and enhanced using a variety of tools, but to a lesser extent than Alternative C. Certain geographic areas containing sensitive resources would receive focused management.

Alternative B was selected as the BLM's Preferred Alternative in the Draft RMP/EIS. This alternative represents the mix and variety of actions that, in the opinion of BLM, best resolve the issues and management concerns in consideration of all values and programs. This alternative includes recommendations made to the BLM by the Western Montana RAC. As a result of public comment received on the Draft RMP/EIS, Alternative B was adjusted but remained the BLM's preferred alternative and proposed plan.

**Alternative C** emphasizes active measures to enhance fish and wildlife habitats. Production of products from vegetation management in all habitats would be secondary to restoring healthy forest, upland and riparian areas. Production of food, fiber, minerals and services would be more constrained than in Alternatives B or D and in some cases and in some areas, uses would be excluded to protect sensitive resources. Under this alternative, constraints would more often be applied to broad habitats rather than focusing on specific sensitive resources in particular geographic areas.

**Alternative D** emphasizes active management to produce food, fiber, minerals and services, and includes the highest level of forest and woodland treatments. In this alternative, constraints to protect sensitive resources would tend to be implemented in specified geographic areas rather than across the planning area. This alternative maintains current levels of fish and wildlife habitats but does not seek to increase those habitats. Developed recreation activities would be emphasized in Alternative D. Land health restoration activities would focus on areas that would also provide tangible products.

Public input received throughout the planning process was considered in the development of the alternatives. Alternative A, continuation of current management, is based on existing planning decisions that remain valid and current direction and policy. The remaining alternatives were developed with input received during scoping and focus question workshops, from work completed by subgroups of the Western Montana Resource Advisory Council (RAC), with expertise from the interdisciplinary planning team, and with input from local, State, federal and tribal governments. Alternative B was identified as the agency preferred alternative in the Draft RMP/EIS and incorporated recommendations made by the Western Montana RAC. This same alternative became the proposed alternative in the Proposed RMP/Final EIS, but as modified based on the consideration of public comment received on the Draft.

During the early stages of the planning process a number of alternatives were considered, but dropped from detailed analysis for a variety of reasons. The following alternatives were eliminated from detailed study because they did not meet the purpose and need of the proposal or were outside of the technical or legal constraints of developing a land use plan for public lands and resources.

- *Exclusive Use or Protection of certain or all resources*
- *Designation of all routes for Yearlong Travel*
- *Adaptive Management as an alternative*
- *Contracting/Stewardship Management as an alternative*
- *Deferment of all grazing turnout until July 1*

Additional information can be found in Chapter 2, *Alternatives*, of both the Draft RMP/EIS, released in March 2004, and Proposed RMP/Final EIS, released in April 2005.

## **The Environmentally Preferred Alternative**

Alternative B, the agency Preferred Alternative and Proposed Action is considered the environmentally preferable alternative when taking into consideration the human (social and economic) environment as well as the natural environment. The Council on Environmental Quality (CEQ) has defined the environmentally preferable alternative as the alternative that will promote the national environmental

policy as expressed in Section 101 of the NEPA. This section lists six broad policy goals for all Federal plans, programs, and policies:

1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
2. Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
3. Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences;
4. Preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice;
5. Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Based on these criteria, identification of the environmentally preferable alternative(s) involves balancing current and potential resource uses with the need to protect resources, as well as consideration of the human environment. Alternative D could be viewed the least environmentally preferable alternative, as it offers the most intensive, active management for use of the area, which may negatively impact other resource values the most or limit the rate of ecosystem recovery. However, this alternative would provide the most economic benefit to the economy in the short term. Alternative B would be less environmentally preferable than Alternative C, but more preferable than Alternatives A or D. This alternative would provide a balance between sustainable economic benefits and resource protection. Alternative C would be more protective of natural and biological values than Alternatives A, B, or D, but would provide for fewer or restricted uses.

## **MANAGEMENT CONSIDERATIONS IN SELECTING THE APPROVED PLAN**

The BLM is tasked with the job of multiple use management, as mandated under the Federal Land Policy and Management Act and numerous other laws and regulations that govern the management of public lands for various purposes and values. Due to the diversity of community needs and

stakeholders affected by management of BLM lands, there has been both support and opposition to certain components of Alternative B. BLM's objective in choosing Alternative B as the preferred alternative and proposed plan was to address these diverse needs and concerns in a fair manner and provide a practical and workable framework for management of public lands. The BLM is ultimately responsible for preparing a plan consistent with its legal mandates that reflects its collective professional judgement, incorporating the best from competing viewpoints and ideas. The Approved Plan (Alternative B as modified in consideration of public and agency comments and internal review) provides a balance between those reasonable measures necessary to protect the existing resource values and the continued public need for use of the public lands within the planning area.

The quickness with which resource objectives are met was a factor in comparing the alternatives, as was the flexibility the management options provided. Consensus recommendations received from the Western Montana Resource Advisory Council (BLM's official advisory council) also played a major role as proposed management alternatives were considered. Approval of a plan that provides a balance to meet both resource concerns and social and economic concerns in the planning area was also a major factor. Alternative B was selected because it proposed management that will improve and sustain properly functioning resource conditions while considering needs and demands for existing or potential resource commodities and values. In the end, resource use is managed by integrating ecological, economic, and social principles in a manner that safeguards the long term sustainability, diversity and productivity of the land.

The Approved Plan responds to issues related to managing for healthy rangelands and riparian and upland vegetation while still providing for livestock grazing and fish and wildlife habitat by making most of the planning area available for livestock grazing, as long as Standards for Rangeland Health continue to be met, and restricting grazing where it is incompatible with resource values (for example, the Eli Springs and Blue Lake areas). The Approved Plan also gives sensitive habitats such as westslope cutthroat trout spawning areas in streams containing 99 to 100 percent genetically pure populations, special status plant habitats, grizzly bear habitat, and emergent wetland vegetation for waterfowl for heightened consideration when making site-specific grazing management decisions.

Issues regarding management of forest and woodland resources to provide fish and wildlife habitat, reduce fuel loads, and provide commercial wood products are addressed in the Approved Plan by focusing management in three geographic areas where treatments/harvest will assist in restoring habitats, allowing treatment/harvest in Cool/Moist habitat types (in consideration of other resource values), and using all tools in aspen restoration efforts.

The Approved Plan specifies conditions for permitted activities such as fluid mineral leasing, communication uses, and other commercial uses as appropriate at the land use plan level to resolve concerns regarding impacts of commercial uses. Impacts on uses as a result of protective management were disclosed in the Proposed RMP/Final EIS, and considered in conjunction with impacts to resource values, with Alternative B providing the best balance in allowing for uses to occur while providing for protection of resource values and public health and safety. The Approved Plan responds to issues regarding noxious weeds and invasive species by maintaining BLM's integrated management approach as well as emphasizing the reestablishment and restoration of native plants during project activities and as a part of the watershed assessment process.

Concerns about specific resource values are addressed throughout the Approved Plan, and eliminated the need to designate some areas as Areas of Critical Environmental Concern (ACECs) since the proposed management provides adequate protection. Since standard management contained in the Approved Plan protects many of the relevant and important values in the planning area, only eight areas were designated as ACECs where additional special management is necessary.

The Approved Plan responds to travel management and access issues by providing a network of transportation routes that tie into roads administered by the counties, the Forest Service, and State of Montana agencies. Users who value nonmotorized areas for hunting, hiking, solitude, etc. are accommodated by areas that are closed, or along existing routes are not designated for motorized use. Natural and cultural resource protection is also accomplished by the limitation of motorized travel to the routes designated in Alternative B. Concerns with open road densities expressed by the Fish and Wildlife Service and FWP played a factor in selection of Alternative B along with management of routes on adjacent State lands (both DNRC and FWP) and Forest service lands and the recommendation of Alternative B to BLM by the Western Montana Resource Advisory Council.

Consistency of the Approved Plan with other local, State, Tribal and federal plans and policies (which sometimes conflict amongst themselves) was also considered as a factor in alternative selection. The Approved Plan is consistent with plans and policies of the Department of the Interior and Bureau of Land Management, other federal agencies, state government, and local governments to the extent that the guidance and local plans are also consistent with the purposes, policies, and programs of federal law and regulation applicable to public lands. As Cooperating Agencies in development of the Dillon RMP, Beaverhead and Madison counties have determined that Alternative B is consistent with pertinent county planning documents, though both counties maintain some concerns in terms of alternative preference, especially regarding travel management. Both

Beaverhead and Madison Counties filed identical protests on the plan. Commissioners in both counties have indicated that their interest in protesting was specifically to maintain "standing" in the protest resolution process and in any future litigation filed in regard to the Dillon RMP, rather than based on any particular objection to specific management provisions.

The Governor's Office did not identify any inconsistencies between the Draft RMP/EIS and state or local plans, policies, and programs; nor were any inconsistencies noted following the 60-day Governor's Consistency Review of the Proposed RMP/Final EIS (initiated April 25, 2005, in accordance with planning regulations at 43 CFR Part 1610.3-2(e)).

## MITIGATION MEASURES

Measures to avoid or minimize environmental harm were built into the Approved Plan where practicable. Many of the standard management provisions will minimize impacts when applied to activities proposed in the planning area. The *Western Montana Standards for Rangeland Health* (see Appendix A) will be used as the base standards to assess the health of BLM lands in the planning area. The *Guidelines for Livestock Grazing* will be applied as appropriate. Best management practices (BMPs) will be used (when applicable) for a number of uses including livestock grazing, forest activities, placer mining, oil and gas development, and wind energy (see Appendix B). Additional measures to mitigate environmental impacts may also be developed during subsequent NEPA analysis at the activity level planning and project stages.

## PLAN MONITORING

Monitoring is the repeated measurement of activities and conditions over time. BLM planning regulations (43 CFR Part 1610.4-9) call for monitoring resource management plans on a continual basis and establishing intervals and standards based on the sensitivity of the resource to the decisions involved. CEQ regulations implementing NEPA state that agencies may provide for monitoring to assure that their decisions are carried out and should do so in important cases (40 CFR Part 1505.2(c)).

There are three types of monitoring. These include implementation, effectiveness, and validation monitoring, described below.

### *Implementation Monitoring*

Implementation monitoring is the most basic type of monitoring and simply determines whether planned

activities have been implemented in the manner prescribed by the plan. Some agencies call this compliance monitoring. This monitoring documents BLM's progress toward full implementation of the land use plan decision. There are no specific thresholds or indicators required for this type of monitoring.

### *Effectiveness Monitoring*

Effectiveness monitoring is aimed at determining if the implementation of activities has achieved the desired goals and objectives. Effectiveness monitoring asks the question: Was the specified activity successful in achieving the objective? This requires knowledge of the objectives established in the RMP as well as indicators that can be measured. Indicators are established by technical specialists in order to address specific questions, and thus avoid collection of unnecessary data. Success is measured against the benchmark of achieving the objectives (desired future conditions) established by the plan.

### *Validation Monitoring*

Validation monitoring is intended to ascertain whether a cause-and-effect relationship exists among management activities or resources being managed. It confirms whether the predicted results occurred and if assumptions and models used to develop the plan are correct. This type of monitoring is often done by contract with another agency, academic institution, or other entity, and is usually expensive and time consuming since results are not known for many years.

Since land use plan monitoring is the process of (1) tracking the implementation of land use planning decisions and (2) collecting and assessing data/information necessary to evaluate the effectiveness of land use planning decisions, monitoring related to the RMP will consist of implementation and effectiveness monitoring.

The BLM will monitor the Approved Plan to determine whether the objectives set forth in this document are being met and if applying the land use plan direction is effective (see Appendix AA for a Plan Monitoring Roster). Monitoring for each program area is outlined in the *Management Decision* section of the Approved Plan. If monitoring shows land use plan actions or best management practices are not effective, BLM may modify or adjust management without amending or revising the plan as long as assumptions and impacts disclosed in the analysis remain valid and broad-scale goals and objectives are not changed (see the discussion on *Maintaining the Plan*). Where the BLM considers taking or approving actions which will alter or not conform to overall direction of the plan, the BLM will prepare a plan amendment or revision and environmental analysis of appropriate scope (see the discussion on *Changing the Plan*).

## PUBLIC INVOLVEMENT

One of BLM's primary objectives during development of the Dillon RMP was to understand the views of various publics by providing opportunities for meaningful participation in the resource management planning process. To achieve this, BLM, along with Beaverhead and Madison Counties, worked with the Montana Consensus Council to develop techniques and opportunities that went beyond the standard public involvement process required during preparation of an RMP and EIS.

These techniques included asking citizens prior to scoping how they would like to participate in the development of the RMP and what strategies might encourage their involvement. Efforts continued with scoping meetings to identify issues and comment on proposed planning criteria, an Information Fair to share baseline data to be used in the development of the RMP, opportunity to review the Wild and Scenic River eligibility findings, the use of issue-based subgroups established by the Western Montana RAC, opportunity to review the *RMP Digest* released in January 2003 and submit additional information, focus question workshops designed to allow the public to provide alternative suggestions, briefings for and discussions with government agency representatives and tribal representatives, and open houses and comment meetings convened after release of the Draft RMP/EIS in April 2004. BLM also used planning *Update* newsletters, media news releases, a toll-free information number, and website postings to offer up-to-date

information to groups, individuals and agencies. In-depth information on these efforts is included in both the Draft Dillon RMP/EIS and Proposed Dillon RMP/Final EIS in Chapter 5, *Consultation and Coordination*.

BLM will continue to actively seek the views of the public, using techniques such as news releases and mass mailings to ask for participation and inform the public of new and ongoing project proposals, site-specific planning, and opportunities and timeframes for comment. Annual land use plan updates prepared to track and monitor progress of plan implementation will be made available to the public upon request. BLM will also continue to coordinate, both formally and informally, with the numerous state, federal, tribal and local agencies and officials interested and involved in the management of public lands in southwest Montana.

## AVAILABILITY OF THE PLAN

Copies of the Record of Decision and the Dillon Resource Management Plan are available by request from the following locations: BLM Dillon Field Office, 1005 Selway Drive, Dillon Montana 59725 (406) 683-2337, and on the Dillon Field Office website at [www.mt.blm.gov/dfo](http://www.mt.blm.gov/dfo) (subject to change based on court orders regarding access to Department of Interior websites).

## FIELD MANAGER RECOMMENDATION

Having considered a full range of reasonable alternatives, associated effects, and public input, I recommend adoption and implementation of the attached Dillon Resource Management Plan.



Tim Bozorth  
Dillon Field Manager



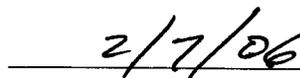
Date

## APPROVAL

In consideration of the foregoing, I approve the Dillon Resource Management Plan.



Howard Lemm  
Acting State Director, Montana/Dakotas



Date



# APPROVED

# RESOURCE MANAGEMENT PLAN

## INTRODUCTION

This Approved Plan replaces the Dillon Management Framework Plan approved in 1979 and is now the base land use plan for public lands administered by the BLM's Dillon Field Office. The Approved Plan adopts the management described in Alternative B and the Management Common to All Alternatives section presented in the Proposed Dillon RMP/Final EIS (USDI-BLM 2005a), with adjustments as described in the *Notice of Modification* and *Clarification* sections of the ROD.

## Vision

The vision identified for the planning area as a result of this planning process provides overall direction for the public lands administered by the BLM's Dillon Field Office. The vision states:

*Within the capability of the resources:*

- *Sustain and where necessary restore the health and diversity of forest, rangeland, aquatic, and riparian ecosystems;*
- *Support a sustainable flow of benefits in consideration of the social and economic systems of southwest Montana; and*
- *Provide diverse recreational and education opportunities.*

## Consideration of Other BLM Plans and Policies

This plan incorporates decisions contained in the following documents unless or until amended or replaced:

- Axolotl Lakes Habitat Management Plan (USDI-BLM 1976a)
- Blacktail Habitat Management Plan (USDI-BLM 1976b)
- Mountain-Foothills Grazing EIS (USDI-BLM 1980a)
- Hidden Pasture Bighorn Habitat Management Plan (USDI-BLM 1980b)
- Sheep Creek Aquatic Habitat Management Plan (USDI-BLM 1981)
- Red Rock Waterfowl Habitat Management Plan (USDI-BLM 1983a)

- Wall Creek Allotment Habitat Management Plan (USDI-BLM 1983b)
- Bear Trap Canyon Wilderness Management Plan (USDI-BLM 1984a)
- Lower Big Hole River Recreation Area Management Plan (USDI-BLM 1987a)
- Vegetation Treatment of BLM Lands in Thirteen Western States (USDI-BLM 1991a)
- Montana Statewide Wilderness Study Report, Record of Decision and Statewide Overview (USDI-BLM 1991b)
- Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Montana, North Dakota and South Dakota (USDI-BLM 1996a)
- Lee Metcalf Wilderness Fire Management Guidebook (USDA-FS and USDI-BLM 1997)
- Centennial Mountains Travel Management Plan (USDI-BLM 2001a)
- Lower Madison River Recreation Area Management Plan (USDI-BLM 2003a)
- Final Off-Highway Vehicle Environmental Impact Statement and Plan Amendment for Montana, North Dakota and Portions of South Dakota (USDI-BLM and USDA-FS 2001a, BLM Record of Decision, June 2003)
- Fire/Fuels Management Plan Environmental Assessment/Plan Amendment for Montana and the Dakotas (USDI-BLM 2003b)
- Bureau of Land Management National Sage-Grouse Habitat Conservation Strategy (USDI-BLM 2004b)
- Partners Against Weeds (USDI-BLM 1996b)
- Montana Weed Management Plan (Duncan 2001)

In the event there are inconsistencies or discrepancies between previously approved plans and this Approved Plan, the decisions contained in the Approved Plan will be followed.

The Dillon Field Office will continue to tier to statewide, national, and programmatic EISs and other NEPA and planning documents, as well as consider and apply Best Management Practices or other management protocols contained in other planning documents after appropriate site-specific analysis.

All future resource authorizations and actions will conform to, or be consistent with the decisions contained in this Approved Plan. All existing operations and activities authorized under permits, contracts, cooperative agreements or other authorizations will be modified, as necessary, to conform with this plan within a reasonable timeframe. How-

ever, this plan does not repeal valid existing rights on public lands. A valid existing right is a claim or authorization that takes precedence over the decisions developed in this plan. If such authorizations come up for review and can be modified, they will also be brought into conformance with the plan.

While the Final EIS for the Dillon RMP constitutes compliance with NEPA for the broad-scale decisions made in this Approved Plan, BLM will continue to prepare Environmental Assessments (EAs) and Environmental Impacts Statements (EISs) where appropriate as part of implementation level planning and decision-making.

## PLAN IMPLEMENTATION

Plan implementation is a continuous and active process. Decisions presented in the *Management Decisions* section of this Approved Plan are of three types: Immediate, One-Time, and Long-Term.

- *Immediate Decisions*

These decisions go into effect upon signature of the Record of Decision and Approved Plan. These include decisions such as the allocation of lands as available or unavailable for oil and gas leasing, ACEC designations, and OHV designations. Immediate decisions require no additional analysis and provide the framework for any subsequent activities proposed in the planning area. Proposals for actions such as oil and gas leasing, land adjustments, and other allocation-based actions will be reviewed against these decisions/allocations to determine if the proposal is in conformance with the plan.

- *One-Time Decisions*

These types of decisions include those that are implemented after additional site-specific analysis is completed. Examples are implementation of the recommendations to withdraw lands from locatable mineral entry or development of a conservation strategy or habitat management plan. One-time decisions usually require additional analysis and are prioritized as part of the BLM budget process.

- *Long-Term Guidance/Life of Plan Direction*

These decisions include the goals, objectives, and management actions established by the plan that are applied during site-specific analyses and activity planning. This guidance is applied whether the action is initiated by the BLM or by a non-BLM project proponent. Long-term guidance and plan direction is incorporated into BLM management as implementation level planning and project analysis occurs (for example, as a result of the watershed assessment process or receipt of a land use application). The watershed assessment schedule

(see Map 20) establishes the order in which land health evaluations will occur.

Priorities for implementation of "one-time" RMP decisions will be based on several criteria, including:

- current and projected resource needs and demands;
- National and Statewide BLM management direction and program emphasis, and
- funding

## General Implementation Schedule of "One-Time" Actions

Decisions in this plan will be implemented over a period of years depending on budget and staff availability. The schedule outlined in Appendix Y establishes tentative timeframes for completion of the "one-time" actions identified in the Approved Plan. Most of these actions require additional analysis and site specific activity planning. This schedule does not include the decisions which are effective immediately upon approval of the plan (usually allocations), or the actions which describe the ongoing management that will be incorporated and applied as site-specific proposals are analyzed and watershed assessments are completed on an ongoing basis.

This schedule will assist BLM managers and staff in preparing budget requests and in scheduling work. However, the proposed schedule must be considered tentative and will be affected by future funding, changing program priorities, non-discretionary workloads, and cooperation by partners and external publics.

## Implementation Updates

BLM will prepare an annual update report on the implementation of the RMP. This report will be released in January of the year following the fiscal year reviewed (for example, January 2007 for Fiscal Year 2006) and will be available to the public on the internet, with hard copies available upon request. Annual review of the plan will provide consistent tracking of accomplishments and provide information that can be used to develop annual budget requests to continue implementation.

## Maintaining the Plan

Land use plan decisions and supporting information can be maintained to reflect minor changes in data, but maintenance is limited to refining, documenting, and/or clarifying previously approved decisions. Some examples of maintenance actions include:

- Correcting minor data, typographical, mapping, or tabular data errors

- Refining baseline information as a result of new inventory data (e.g., changing the boundary of an archaeological district, refining the known habitat of special status species, or adjusting the boundary of a fire management unit based on updated fire regime condition class inventory, fire occurrence, monitoring data, and/or demographic changes)
- Applying an existing oil and gas lease stipulation to a new area prior to the lease sale based on new inventory data (e.g., apply an existing protective stipulation for sage-grouse to a newly discovered sage-grouse lek).

The BLM expects that new information gathered from field inventories and assessments, research, other agency studies, and other sources will update baseline data and/or support new management techniques, best management practices, and scientific principles. Adaptive management strategies may be used when monitoring data is available as long as the goals and objectives of the plan are met (see the *Adaptive Management* section). Where monitoring shows land use plan actions or best management practices are not effective, modifications or adjustments may occur without amendment or revision of the plan as long as assumptions and impacts disclosed in the analysis remain valid and broad-scale goals and objectives are not changed.

Plan maintenance will be documented in supporting records (see Appendix Z for an example of a Plan Maintenance Roster) and reported in annual planning updates. Plan maintenance does not require formal public involvement, inter-agency coordination, or the NEPA analysis required for making new land use plan decisions.

## Changing the Plan

The Approved Plan may be changed, should conditions warrant, through a plan amendment or plan revision process. A plan amendment may become necessary if major changes are needed or to consider a proposal or action that is not in conformance with the plan. The results of monitoring, evaluation of new data, or policy changes and changing public needs might also provide the impetus for an amendment. Generally, an amendment is issue-specific. If several areas of the plan become outdated or otherwise obsolete, a plan revision may become necessary. Plan amendments and revisions are accomplished with public input and the appropriate level of environmental analysis.

# PLAN EVALUATION AND ADAPTIVE MANAGEMENT

## Plan Evaluation

Evaluation is a process in which the plan and monitoring data are reviewed to see if management goals and objectives are being met and if management direction is sound. Land use plan evaluations determine if decisions are being implemented, whether mitigation measures are satisfactory, whether there are significant changes in the related plans of other entities, whether there is new data of significance to the plan, and if decisions should be changed through amendment or revision. Monitoring data gathered over time is examined and used to draw conclusions on whether management actions are meeting stated objectives, and if not, why. Conclusions are then used to make recommendations on whether to continue current management or to identify what changes need to be made in management practices to meet objectives.

BLM will use land use plan evaluations to determine if the decisions in the RMP, supported by the accompanying NEPA analysis, are still valid in light of new information and monitoring data. Evaluation of the RMP will generally be conducted every five years, unless unexpected actions, new information, or significant changes in other plans, legislation, or litigation triggers an evaluation.

The following estimated evaluation schedule will be followed for the Dillon RMP:

- January 2011
- January 2016
- January 2021
- January 2026

Evaluations will follow the protocols established by the BLM Land Use Planning Handbook (H-1601-1) or other appropriate guidance in effect at the time the evaluation is initiated.

## Adaptive Management

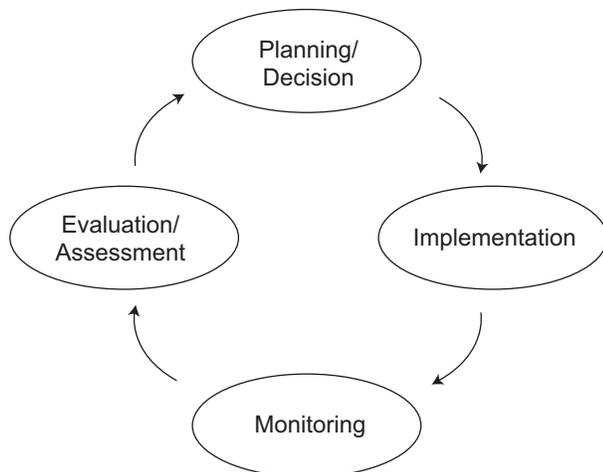
As defined by the Office of Environmental Policy and Compliance, adaptive management is a system of management practices based on clearly identified outcomes, monitoring to determine if management actions are meeting outcomes, and, if not, facilitating management changes that will best ensure that outcomes are met or re-evaluated.

As described in the Draft RMP/EIS and the Proposed RMP/Final EIS, the Dillon RMP fosters "adaptiveness" by the presentation of goals and objectives that focus on reaching outcomes rather than identifying inflexible standards and prescriptions that may not be applicable in certain situations.

When land use plan actions or best management practices are found to be ineffective, modifications may occur without amendment or revision of the plan as long as assumptions and impacts disclosed in the analysis remain valid and broad-scale goals and objectives are not changed. This approach, as depicted on Figure 1, uses on-the-ground monitoring, review of scientific information, and consideration of practical experience and common sense to adjust management and modify implementation of the plan to reach the desired outcome.

**Figure 1**

**Four Step Implementation Process**



## MANAGEMENT DECISIONS

This section of the Approved Plan presents the goals and objectives, land use allocations, and management actions established for public lands managed by the BLM's Dillon Field Office. These management decisions are presented by program area. Not all types of decisions were identified for each program. For instance, only *Goals* and *Actions* were identified in the *Air Quality* section, and thus only *Goals* and *Actions* are described in that section. A *Monitoring* section is also included for each program to describe how the program decisions will be tracked to ensure implementation.

The Draft RMP/EIS and Proposed RMP/Final EIS identified *Desired Future Conditions* for several programs, which are included in this Approved Plan as *Objectives*. Most of the identified objectives (desired future conditions) are long-range in nature and will not be achieved immediately, but rather are assumed to require a period of 20 to 50 years to achieve. Some of the sections from the Draft and Proposed RMPs have been combined or reorganized for ease in reference, but the content remains as contained in the Proposed RMP, except as described in the *Notice of Modifications* and *Clarifications* sections of the ROD.

Data used in development of the Approved Plan are dynamic. The data and maps used throughout the Approved Plan are for land use planning purposes and will be refined as site-specific planning and on-the-ground implementation occurs. Updating data is considered plan maintenance which will occur over time as the RMP is implemented (see the section on *Plan Implementation*). Please note that all acreages presented in the Approved Plan are estimations, even when presented to the nearest acre.

This section is organized alphabetically by program area with the following titles:

- Abandoned Mine Lands**
- Air Quality**
- Areas of Critical Environmental Concern (ACECs)**
- Back Country Byways**
- Cultural Resources**
- Economic Conditions**
- Environmental Justice**
- Fire and Fuels Management**
- Fish and Special Status Fish**
- Forest and Woodland Vegetation and Forest Products**
- Geologic Resources**
- Hazardous Materials**
- Indian Trust Resources**
- Lands and Realty**
- Livestock Grazing**
- Minerals (Leasable)**
- Minerals (Locatable)**
- Minerals (Saleable/Mineral Materials)**
- National Trails**
- Noxious Weeds, Invasive, and Non-Native Species**
- Paleontological Resources**
- Rangeland Vegetation**
- Riparian and Wetland Vegetation**
- Recreation**
- Renewable Energy**
- Social Conditions**
- Soils**
- Special Status Plants**
- Transportation and Facilities**
- Travel Management and OHV Use**
- Tribal Treaty Rights**

Utility and Communication Corridors  
 Vegetation (see Forest and Woodland, Invasive Species, Rangeland or Riparian and Wetland Vegetation sections)  
 Visual Resources  
 Water  
 Wild and Scenic Rivers  
 Wild Horses and Burros  
 Wilderness  
 Wilderness Study Areas  
 Wildlife and Special Status Birds and Mammals

Maps depicting the management decisions are provided at the back of the document for easy reference.

## ABANDONED MINE LANDS

### *Goal*

Protect humans and the environment from exposure to abandoned mine lands while considering associated resource values such as historic resources.

### *Actions*

- 1 Continue to update and refine the inventory of abandoned mine sites on public lands in the planning area.
- 2 Prioritize reclamation of abandoned mine lands based on the degree of threat to human health, the environment, and public safety. Place emphasis on those areas that present serious threats to the environment, especially to water quality, and those that pose safety risks to the public. Conduct any reclamation in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan, following project level planning and analysis under NEPA and other pertinent laws.

### *Monitoring*

Reclamation and mitigation work done on abandoned mine sites will be monitored to ensure compliance with laws and regulations and with the terms of the work order or contract.

Clean-up sites will be monitored to protect and safeguard human health, prevent/restore environmental damage and to limit the BLM's liability. This monitoring includes such things as conducting periodic water and soil sampling, monitoring for revegetation of reclaimed areas, dust control, erosion and other signs of potential danger to human health and harm to the environment.

The number of clean-up efforts in progress on BLM lands in the planning area will be reported in the Annual Program Summary and Planning Update, as well as the number of acres inventoried to identify AML issues.

## AIR QUALITY

### *Goal*

Meet the National Ambient Air Quality Standards under the Clean Air Act (as amended in 1977), and prevent significant deterioration of air quality within the Dillon Field Office Resource Area with all authorized actions.

### *Actions*

- 1 Implement the *Western Montana Standards for Rangeland Health* to ensure that air quality meets Montana standards.
- 2 Minimize or prevent air quality degradation throughout the planning area by applying mitigation measures on a project-by-project basis.
- 3 Coordinate with the Montana/Idaho Airshed Group and Montana Department of Environmental Quality.
- 4 Participate in state and tribal smoke management programs in accordance with the EPA Interim Air Quality Policy for Wildland and Prescribed Fires (EPA 1998).
- 5 Develop burn plans for all prescribed burn treatments that include incident and cumulative air quality considerations.
- 6 Require permits where necessary for stationary facilities.

### *Monitoring*

Monitoring of air quality and other conditions conducted by the Smoke Monitoring Unit of the Montana/Idaho Airshed Group, in coordination with Montana DEQ, will be used to determine whether BLM actions that may contribute to air quality concerns (mainly prescribed fire or slash burning) may proceed or be deferred until conditions improve.

The number of BLM actions contributing to any violation of national air quality standards will be tracked annually (expected to generally be none given BLM's participation in the Montana/Idaho Airshed Group). The number of areas/acres that meet the Air Quality standard in the *Western Montana Standards for Rangeland Health* and the total number of areas/acres assessed will also be reported in the Annual Program Summary and Planning Update.

## AREAS OF CRITICAL ENVIRONMENTAL CONCERN

### *Goal*

Protect relevant and important values and apply special management where standard or routine management is not

adequate to protect the values from risks or threats of damage/degradation or to provide for public safety from natural hazards.

**Allocations**

Designate approximately 73,184 acres in the following areas in the Dillon Field Office as Areas of Critical Environmental Concern (see Map 3) due to the need to apply the special management to prevent degradation of the relevant and important values:

- Beaverhead Rock ACEC (120 acres)
- Block Mountain ACEC (8,661 acres)
- Blue Lake ACEC (430 acres)
- Centennial Mountains ACEC (40,715 acres)
- Centennial Sandhills ACEC (1,040 acres)
- Everson Creek ACEC (8,608 acres)
- Muddy Creek/Big Sheep Creek ACEC (13,097 acres)
- Virginia City Historic District ACEC (513 acres)

**Actions**

1. Review proposed actions within designated ACECs during activity level planning to ensure relevant and important values are protected.
2. Require plans of operation in all ACECs when mineral activities are proposed under 43 CFR Part 3809.
3. Apply the special management identified for each designated ACEC (see Actions 5-12 in each respective ACEC section), as well as standard management provisions that will protect relevant and important values. See Table 3 for a summary of both special and standard management provisions to be applied within the designated ACECs.
4. Monitor relevant and important values within the designated ACECs (see each specific ACEC section for monitoring information).

**Table 3  
Summary of Management Constraints in ACECs  
(including Special Management and Standard RMP Provisions)**

	<b>Grazing<sup>1</sup></b>	<b>Timber<sup>2</sup></b>	<b>Mineral Materials<sup>3</sup></b>	<b>Oil &amp; Gas<sup>4</sup></b>	<b>Locatables<sup>5</sup></b>	<b>ROWs<sup>6</sup></b>	<b>Motorized Travel<sup>7</sup></b>
Beaverhead Rock	O	N/A	L	L	W	P	L
Block Mountain	O	N/A	L	L	L	O	L
Blue Lake*	P	P	L	P	L	O	L
Centennial Mountains*	O/L	L/P	L	L/P	L	O/L	L
Centennial Sandhills	O	N/A	L	L	L	O	L
Everson Creek	O	O	L	L	L/W	O	L
Muddy/Big Sheep Creek*	O	N/A	L/P	L	L	O	L
Virginia City	O	O	L	P	W	O	L

O=Open    L=Limited or Restricted    N/A=Not Applicable    P=Prohibited    W=Withdraw from Locatable Mineral Entry

\*Lands in the Centennial Mountains ACEC that also lie within the Centennial Mountains WSA boundary, lands in the Blue Lake ACEC that lie within the Axolotl Lakes WSA, and lands in the Muddy/Big Sheep Creek ACEC that also lie within the Hidden Pasture WSA will be managed under the *Interim Management Policy for Lands Under Wilderness Review*, unless more restrictive provisions are outlined in the plan or in ACEC special management.

<sup>1</sup>Lands that are available for grazing in ACECs will be managed to meet the *Western Montana Standards for Rangeland Health*, with the exception of the Centennial Sandhills ACEC which may need to deviate from some of the standards in order to protect and enhance the relevant and important values.

<sup>2</sup>Where commercial timber is available, treatment/harvest within the ACEC will need to be conducted in a manner that protects the relevant and important values

<sup>3</sup>When considering the authorization of mineral materials sites within ACECs, activities must not degrade relevant and important values, or the activity will not be authorized.

<sup>4</sup>Oil and gas leasing stipulations to protect the relevant and important values in the ACEC will be applied to areas available for lease, and will generally limit oil and gas activity at least in portions of the ACEC boundaries.

<sup>5</sup>Relevant and important values in ACECs not withdrawn from mineral entry will still be protected under standard provisions that allow protective measures to be placed on locatable mineral activities conducted under 43 CFR Part 3809.

<sup>6</sup>Authorization of rights-of-ways is discretionary, and measures to protect relevant and important values in ACECs that are not closed to rights-of-ways may be required, or the authorization may be denied.

<sup>7</sup>Motorized travel in all ACECs is restricted to routes designated as open in the Approved Plan.

## BEAVERHEAD ROCK ACEC

The Beaverhead Rock ACEC (see Map 4) is located fifteen miles northeast of Dillon, Montana. There are approximately 120 acres of public land in this area. This includes the N1/2 of the NW1/4 and the SW1/4 of the NW1/4 of Section 22, Township 5 South, Range 7 West. Approximately 70 acres of land adjacent to, and south of, this parcel of public land are owned by the State of Montana and managed by the Department of Fish, Wildlife and Parks as a primitive state park.

Beaverhead Rock is one of a few physiographic features mentioned specifically in the journals of Lewis and Clark and is a prominent and important feature of the Lewis and Clark National Historic Trail. While traveling with Lewis and Clark and the Corps of Discovery on August 8, 1805, Sacajawea recognized the point of a high plain. Sacajawea's people knew this prominent landscape feature as "the beavers' head". Recognition of this feature was important to the Corps of Discovery because it informed the company that the land of the Shoshone was not far and they might obtain horses for faster cross country travel. It also told them that the Continental Divide was close at hand where they would encounter rivers that flow into the Pacific.

- 5 Apply the following special management in the ACEC boundary (see Map 4) to protect the historic values associated with Beaverhead Rock itself, a prominent and important feature of the Lewis and Clark National Historic Trail.
  - a. Prohibit new right-of-ways.
  - b. Withdraw the 120 acres from locatable mineral entry.
  - c. Consider transfer of lands within the ACEC from federal ownership only if the State of Montana applies for a conveyance under the Recreation and Public Purposes Act in order to manage these lands in concert with the adjacent primitive park administered by Montana Fish, Wildlife and Parks. Otherwise, retain lands in federal ownership.
  - d. Evaluate any other proposals against the need to protect this recognizable landmark along the Lewis and Clark National Historic Trail.

Under standard management, No Surface Occupancy stipulations would be applied to any oil and gas leases in the ACEC.

### *Monitoring*

A long term monitoring program will be established for the Beaverhead Rock ACEC and will include visitation of the designated ACEC to establish baseline information on the current condition of cultural resource values. Once the baseline condition assessment information has been compiled, the ACEC will be monitored at least once every four years to identify any potential adverse impacts that might occur and identify trends in resource condition and/or deterioration, and to determine whether any actions taking place in the area are causing detrimental changes to the cultural values deemed relevant and important. Any changes will be noted and recorded in the cultural resource data base and reported to the Field Manager.



## BLOCK MOUNTAIN ACEC

The Block Mountain ACEC (see Map 5) is located fifteen miles northeast of Dillon, Montana. There are approximately 8,661 acres of public land in this area. These lands lie in portions of Sections 14, 15, 21, 22, 23, 24, 25, 26, 27, 28, 33, 34, and 35 of Township 4 South, Range 8 West, and portions of Sections 2, 3, 4, 9, 10, and 11 in Township 5 South, Range 8 West. This area exhibits low topographic relief which provides for easy access. The area contains exceptional fold and thrust belt structure that is easily visible, making it a premier location to teach geologic field mapping. Each year a number of geology field camps from around the world visit this site. If major disturbances were to occur, these values could be lost.

- 6 Apply the following special management in the ACEC boundary (see Map 5) to protect the exceptional fold and thrust belt structure and to ensure continued access to the area:
  - a. Evaluate the density and placement of any facilities or land use authorizations proposed in the area and require measures to protect the integrity of the geologic features.
  - b. Require permits for educational uses within the area.
  - c. Develop educational materials describing access to the area and the features within and appropriate use protocols.
  - d. Evaluate all mineral use proposals within the area and identify and mitigate impacts to important features in the area.

### *Monitoring*

On-site monitoring of the Block Mountain ACEC area will be done on a periodic basis. Monitoring will include checking the access routes to the area for road conditions, locked gates and other obstructions. It will also note the condition of signs, check for litter, weeds and for any destruction of geologic features. Conflicts between visitors to the area and the adjacent land owners will also be noted.

The density and placement of facilities or land use authorizations proposed in the area will also be reviewed to insure the integrity of the geologic features is protected. Any significant problems will be reported to the Field Manager.

## BLUE LAKE ACEC

The Blue Lake ACEC (see Map 6) is located twelve miles southwest of Ennis, Montana, and supports the only known population of axolotl in southwest Montana and possible anywhere else in Montana. There are approximately 430 acres of public lands in this area. These lands lie in portions of Sections 7, 18, and 19 in Township 7 South, Range 2 West. This ACEC lies entirely within the Axolotl Wilderness Study Area (WSA).

The axolotl is a neotenic form of tiger salamander that retains gills and an aquatic lifestyle from living in a cold, relatively sterile environment, with no fish. Research has shown that these animals metamorphose into normal terrestrial adult salamanders when water temperatures exceed approximately 72 degrees F. for more than 30-45 days. No other suitable habitat is present in the Axolotl Lakes area or in the general vicinity where other axolotl populations could be transplanted. The area is sensitive because any activity that contributes to the organic enrichment of Blue Lake or increased water temperatures could decimate the axolotl.

- 7 Apply the following special management in the ACEC boundary (see Map 6) to protect the only known population of axolotl in southwest Montana (possibly in Montana):
  - a. Do not authorize activities contributing to nutrient enrichment or increased water temperature in Blue Lake (e.g., livestock grazing, timber harvest, wheeled vehicle use, etc).
  - b. Place or construct barriers to prevent unauthorized motorized travel into the area
  - c. Require no surface occupancy for mineral leasing (under standard management the area is already unavailable for oil and gas leasing since it lies within the Axolotl WSA).
  - d. Develop interpretive materials about the axolotl to inform the public of this special value

Under standard management, the ACEC is subject to the *Interim Management Policy for Lands Under Wilderness Review*, unless more restrictive provisions are outlined. The lands are also not available for long-term grazing under standard management.

### *Monitoring*

Water temperature in Blue Lake will be monitored periodically between mid-June and September. Fences will be maintained periodically to ensure exclusion livestock and wheeled vehicles. The axolotl population in Blue Lake will be sampled in coordination with Montana Fish, Wildlife and Parks at least every five years to identify population structure and ensure that all age class cohorts are represented.

## CENTENNIAL MOUNTAINS ACEC

The Centennial Mountains ACEC (see Map 7) includes the public lands lying south of the Centennial Valley road from Red Rock Pass to the West Fork of Corral Creek. There are approximately 40,715 acres of public land in this area. About 55 percent of the area is included in the Centennial Mountains Wilderness Study Area and is provided protection under the BLM's *Interim Management Policy for Lands Under Wilderness Review*.

The area is an ACEC based on the habitat it contains for grizzly bear, lynx and wolf, its use as a wildlife migration corridor, its outstanding scenic value, and for the only known occurrence in Montana of Whipple's beardtongue. The area provides relatively intact habitat with limited evidence of human-caused impacts, and provides an important route for wildlife migration and movement between high security habitats. The Continental Divide Trail traverses this area and passes through some of the highest quality scenic values in southwest Montana. The dramatic 3,000 foot rise of the northern face of the Centennial Mountains is a well-known landmark in the region. The Taylor Mountain area located between Tom Creek and Odell Creek contains the only known habitat in Montana for Whipple's beardtongue.



Under standard management, the eastern portion of the ACEC is subject to the *Interim Management Policy for Lands Under Wilderness Review*, unless more restrictive provisions are outlined either as standard provisions in the plan, or as special management.

### *Monitoring*

Scenic quality in the Centennial Mountains ACEC will be monitored as described in the *Visual Resources* monitoring section. The amount and extent of surface-disturbing activities that result in habitat fragmentation in the Centennial Mountains ACEC will be tracked on an annual basis and reported to the USFWS, focusing on road density changes and potential effects on grizzly bear, and changes in forest habitat suitability for lynx. Monitoring of the Whipple's Beardtongue will be carried out as described under the *Special Status Plants* monitoring section.

- 8 Apply the following special management in the ACEC boundary (see Map 7) to protect the habitat it contains for grizzly bear, lynx, and wolf, its use as a wildlife migration corridor, its outstanding scenic value, and the only known occurrence in Montana of Whipple's beardtongue (in the Taylor Mountain area).
  - a. Incorporate landscape design principles into vegetation treatments to maintain scenic values
  - b. Do not authorize new permanent roads within the ACEC to maintain unfragmented habitat for wildlife migration
  - c. Evaluate proposed activities, including backcountry helicopter operations and winter recreational use, for their potential to affect important and relevant values in the area and do not permit any activities that interfere with protection of those values.
  - d. Allow livestock use as currently authorized. Evaluate any proposed changes in grazing, including time and intensity of use, for impacts on relevant and important values and allow if relevant and important values in the ACEC are maintained or enhanced.
  - e. Do not allow conversion of grazing permits from cattle to sheep to avoid potential conflicts with grizzly bear.

## CENTENNIAL SANDHILLS ACEC

The Centennial Sandhills ACEC (see Map 8) is located six miles north of Lakeview, Montana. There are approximately 1040 acres of public land in this area within portions of Sections 21, 22, and 23 of Township 13 South, Range 2 West. The area contains one of only two sand dune complexes in Montana, and provides habitat provides for special status plant species.

The area supports ecological processes related to sand dune migration, which provides habitat for several special status plant species including sand wildrye, Fendler cat's-eye, and painted milkvetch. Loss of sand dune activity and other disturbances could put these values at risk.

- 9 Apply the following special management within the ACEC boundary (see Map 8) to protect special status plant habitat associated with the sand dunes in the area:
  - a. Implement management strategies to destabilize sand dunes and maintain the unique habitat within the sandhills area and create early seral habitat for special status plant species (for example, treat with prescribed fire followed by short-term high intensity grazing). Non-mechanical disturbances are preferred, but mechanical disturbances may be employed if non-mechanical methods are not effective at maintaining habitat.
  - b. Continue inventory, monitoring and research studies of special status plant species and habitats.
  - c. Prohibit aerial application of herbicides and pesticides within the ACEC boundary. Other weed control methods may be used within the ACEC boundary but must be designed to protect special status plants within the area.

Other standard management provisions that will assist in protection of the relevant and important values include:

- No authorization of mineral material sites within the ACEC boundary
- No Surface Occupancy stipulations on oil and gas leasing within ½ mile of special status plants.
- Limiting vehicular travel to roads and trails designated as "open"

### *Monitoring*

The Centennial Sandhills ACEC will be monitored to determine the effectiveness of special management and the condition of the area's values, such as the plant communities and populations. Allotments within the Centennial Sandhills ACEC will be evaluated on a regular basis and at that time ACEC monitoring will be part of the process. Species-specific monitoring of plants will be carried out as described under the *Special Status Plants* monitoring section.

## EVERSON CREEK ACEC

This Everson Creek ACEC (see Map 9) is located fifteen miles southwest of Grant, Montana, containing approximately 8,608 acres of public land. The Everson Creek area contains perhaps the oldest archaeological site in Montana as well as several chert quarry and workshop sites. The extensive cultural resources are important both to archaeologists and to Native Americans, and comprise an archaeological district. These resources are extremely fragile and susceptible to damage.

- 10 Apply the following special management within the ACEC boundary (see Map 9) to protect the cultural resources/archaeological district that are important to both archaeologists and to Native Americans:
  - a. Withdraw 2,160 acres of the 8,608 acre area from locatable mineral entry to limit new exploration and development
  - b. Prohibit new road construction in the area unless it avoids all cultural resources and would be reclaimed to original contour.
  - c. Evaluate any new, proposed projects or land use authorizations and require mitigation, or possible abandonment, to prevent surface disturbance and visual intrusions into the area.

Standard management also provides for continued coordination with tribal representatives, as well as standard procedures for dealing with properties and districts eligible to the National Register of Historic Places (NRHP). No Surface Occupancy stipulations would also be applied to any oil and gas leases under standard management.

### *Monitoring*

A long term monitoring program will be established for the Everson Creek ACEC and will include the visitation of a representative sample of cultural resource values within the designated ACEC to establish baseline information on the current condition of cultural resource values. Once the baseline condition assessment information has been compiled, the ACEC will be monitored at least once every four years to identify any potential adverse impacts that might occur and identify trends in resource condition and/or deterioration, and to determine whether any actions taking place in the area are causing detrimental changes to the cultural values deemed relevant and important. Any changes will be noted and recorded in the cultural resource data base and reported to the Field Manager.

## MUDDY CREEK/BIG SHEEP CREEK ACEC

The Muddy Creek/Big Sheep Creek ACEC (see Map 10) lies four miles southwest of Dell, Montana, including portions of the Muddy Creek drainage and continuing upstream along the Big Sheep Creek drainage to its confluence with Deadman Creek. The area contains approximately 22,829 acres of public land with relevant and important scenic values along Big Sheep Creek and the cultural resource values throughout. Portions of the ACEC fall within the Hidden Pasture Wilderness Study Area.

The geomorphology along Muddy Creek proper has resulted in deeply stratified buried cultural deposits located on public lands. There is also a high concentration of rock art pictograph sites. The geomorphological regime and highly erodible soils coupled with the density of known archaeological sites in the area results in circumstances that make the area vulnerable to adverse change. The area provides spectacular scenery, characterized by high palisades and timbered peaks that rise dramatically from the canyon floor. Big Sheep Creek passes through three narrow canyons with intervening open valleys and contains scenic values not typically found in the planning area.

- 11 Apply the following special management within the ACEC boundary (see Map 10) to protect the scenic values along Big Sheep Creek and the cultural values throughout the area:
  - a. Require Plans of Operation for locatable mineral proposals
  - b. Apply special provisions as necessary to protect cultural resources during any project activities (including but not limited to locatable mineral proposals)
  - c. Apply special provisions if necessary to protect scenic values during any project activities (including but not limited to locatable mineral proposals)

Under standard management, portions of the ACEC are not available for mineral material authorizations. Standard management also provides procedures for dealing with properties and districts eligible to the National Register of Historic Places (NRHP). No Surface Occupancy stipulations would be applied to any oil and gas leases under standard management, except for those portions within the Hidden Pasture WSA, which would be unavailable for lease. Any lands in the ACEC that fall within the Hidden Pasture WSA boundary are subject to the *Interim Management Policy for Lands Under Wilderness Review*, unless more restrictive provisions are outlined under other standard or special management.



### *Monitoring*

A long term monitoring program will be established for the Muddy Creek/Big Sheep Creek ACEC and will include the visitation of a representative sample of cultural resource values within the designated ACEC to establish baseline information on the current condition of cultural resource values. Once the baseline condition assessment information has been compiled, the ACEC will be monitored at least once every four years to identify any potential adverse impacts that might occur and identify trends in resource condition and/or deterioration, and to determine whether any actions taking place in the area are causing detrimental changes to the cultural values deemed relevant and important. Any changes will be noted and recorded in the cultural resource data base and reported to the Field Manager.

## VIRGINIA CITY HISTORIC DISTRICT ACEC

The Virginia City Historic District ACEC (see Map 11) is located in Madison County, Montana and includes the public lands in and near Virginia City that lie within the National Historic Landmark boundary. There are approximately 513 acres of public land in portions of Sections 21, 22, 23, 24, 26, 27, 34, and 35, Township 6 South, Range 3 West. The public lands and the landscape they contain, along with recorded historic properties relating to the mining history and settlement of Virginia City add value to the Virginia City experience. Activities on public lands surrounding Virginia City especially make the area vulnerable to adverse change should the character of the viewshed be impacted.

- 12 Apply the following special management within the ACEC boundary (see Map 11) to protect the historic resources and associated landscape within the Virginia City Historic landmark boundary.
  - a. Withdraw 513 acres from locatable mineral entry to limit new exploration and development
  - b. Examine current claims to determine validity when mining proposals may impact historic resources or the landscape
  - c. Consider transfer of the lands only if the State of Montana applies for conveyance under the Recreation and Public Purposes Act to facilitate management in concert with other historic properties in Virginia City

Standard management also provides procedures for dealing with properties and districts eligible to the National Register of Historic Places (NRHP). Other existing protocols for considering impacts to National Historic Landmarks will help protect the relevant and important values. The area would be unavailable for oil and gas leasing under standard provisions as well.

### *Monitoring*

A long term monitoring program will be established for the Virginia City Historic District ACEC and will include the visitation of a representative sample of cultural resource values within the designated ACEC to establish baseline information on the current condition of cultural resource values. Once the baseline condition assessment information has been compiled, the ACEC will be monitored at least once every four years to identify any potential adverse impacts that might occur and identify trends in resource condition and/or deterioration, and to determine whether any actions taking place in the area are causing detrimental changes to the cultural values deemed relevant and important. Any changes will be noted and recorded in the cultural resource data base and reported to the Field Manager.

## BACK COUNTRY BYWAYS

### *Goal*

Highlight and interpret scenic, historic, archaeological or other interest values associated with Back Country Byways in partnership with communities, interest groups, and state and federal agencies.

### *Allocation*

Maintain the Back Country Byway designation along the current route traversing the Medicine Lodge and Big Sheep Creek areas (approximately 50 miles). See Map 12.

### *Action*

- 1 Implement the plan for the Big Sheep Creek National Back Country Byway, with additional emphasis placed on coordinating with local residents in that area to develop information and interpretive materials for visitors to the byway that highlight multiple uses of public lands and land stewardship in the area.

### *Monitoring*

The Big Sheep Creek Back Country Byway will continue to be monitored as part of the overall recreation monitoring efforts. See the *Recreation* section.

## CULTURAL RESOURCES

### *Goal 1*

Preserve and protect significant cultural resources and ensure that they are available for appropriate uses by present and future generations.

### *Allocations*

Assign identified/recorded cultural resources to cultural resource use categories in accordance with BLM Manual 8110. Use categories are described in Appendix C.

### *Actions*

- 1 Prepare and implement cultural resource management plans on a case-by-case basis as needed.
- 2 Monitor a minimum of 10 previously recorded cultural resources (allocated to the *Conservation for Future Use* and/or *Traditional Use* categories) per year to update the site form to current professional standards and to assess the current condition and trend of significant resource values.
- 3 Prepare nomination packages for Everson Creek and Muddy Creek archaeological districts to formally list on the National Register of Historic Places.

- 4 Protect the relevant and important cultural resource values in the Beaverhead Rock ACEC (see Map 4) with the following special management:
  - a. Prohibit new right-of-ways
  - b. Withdraw 120 acres from locatable mineral entry to limit new exploration and development
  - c. Consider transfer of the lands within the ACEC from federal ownership only if the State of Montana applies for conveyance under the Recreation and Public Purposes Act in order to manage these lands in concert with the adjacent primitive park administered by Montana Fish, Wildlife and Parks. Otherwise, retain lands in federal ownership.
  - d. Evaluate any other proposals against the need to protect this recognizable landmark along the Lewis and Clark National Historic Trail
  
- 5 Protect the relevant and important cultural resource values in the Everson Creek ACEC (see Map 9) with the following special management:
  - a. Withdraw 2,160 acres of the 8,608 acre area from locatable mineral entry to limit new exploration and development
  - b. Prohibit new road construction in the area unless it avoids all cultural resources and would be reclaimed to original contour
  - c. Evaluate any new, proposed projects or land use authorizations and require mitigation, or possible abandonment, to prevent surface disturbance and visual intrusions into the area
  
- 6 Protect the relevant and important cultural resource values in the Muddy Creek/Big Sheep Creek (see Map 10) with the following special management:
  - a. Require Plans of Operation for locatable mineral proposals
  - b. Apply special provisions as necessary to protect cultural resources during any project activities (including but not limited to locatable mineral proposals)
  
- 7 Protect the relevant and important cultural values in the Virginia City Historic District ACEC (see Map 11) with the following special management:
  - a. Withdraw 513 acres from locatable mineral entry to limit new exploration and development
  - b. Examine current claims to determine validity when mining proposals may impact historic resources or the landscape
  - c. Consider transfer of the lands only if the State of Montana applies for conveyance under the Recreation and Public Purposes Act to facilitate management in concert with other historic properties in Virginia City

### **Goal 2**

Reduce imminent threats from natural or human-caused deterioration, or potential conflict with other resource uses, by identifying priority geographic areas for new field inventory, based upon a probability for unrecorded significant resources.

#### **Action**

- 1 Coordinate proactive cultural resource inventory under Section 110 of the National Historic Preservation Act with BLM watershed assessment efforts in the planning area. Conduct inventory on a watershed basis using a stratified random nonaligned sample of 40 acre quadrats. Base the stratification of the sample on suitability factors including distance from water, slope and aspect. Inventory an estimated 400 acres in high site probability areas and 100 acres in low site probability areas each year.

### **Goal 3**

Ensure that all authorizations for land and resource use avoid inadvertent damage to federal and nonfederal cultural resource in compliance with Section 106 of the National Historic Preservation Act.

#### **Actions**

- 1 Comply with Section 106 of the National Historic Preservation Act for all federal undertakings.
- 2 Avoid impacts to significant cultural resources (resources considered eligible for the National Register) by project redesign, project abandonment, and/or mitigation of adverse impacts through data recovery/alternative means as a last resort.
- 3 Manage historic mining properties in accordance with the programmatic agreement between BLM, Forest Service and the Montana SHPO or with procedures as amended to BLM-SHPO Protocol Agreement.

### **Goal 4**

Promote stewardship, conservation, and appreciation of cultural resources through educational and public outreach programs in accordance with the BLM Heritage Education program.

#### **Actions**

- 1 Design cultural resource awareness programs to enhance the public appreciation of cultural resource values. These programs include educational lectures/presentations as well as interpretive displays.
- 2 Encourage archaeological research and education programs only at sites designated for *Experimental and Scientific Use* that are in imminent peril of damage or destruction by natural or man-caused events.

- 3 Conduct monitoring, site stabilization, and outreach as appropriate opportunities arise.
- 4 Conduct building preservation and stabilization activities as opportunities arise, depending upon the formation of outside partnerships.

### **Goal 5**

Consult with Native Americans to identify any of their cultural values or religious beliefs that may be affected by BLM authorizations or actions.

### **Actions**

- 1 Conduct required consultations with federally recognized Indian tribes as sovereign nations in a government-to-government relationship with the United States.
- 2 Consult with tribal groups to identify and protect Traditional Cultural Properties.

### **Monitoring**

#### **Goals 1 and 3**

A minimum of 10 previously recorded cultural resource properties that are listed on the National Register of Historic Places or determined eligible for listing, and allocated to the Conservation for Future Use and/or Traditional Cultural Use categories will be visited on an annual basis to update the site form to current professional standards, and to assess the current condition and trend of significant resource values.

Visitation of the previously recorded cultural properties or designated ACEC's will be made by the cultural resource specialist or designated representative. The purpose of the visits will be to monitor the condition of the site(s) and document any disturbance or deterioration noted. The condition of the site and other data collected will be entered into the cultural data base. If the sites are listed on the National Register of Historic Places, or have been determined eligible for listing, consultation with the Deputy Preservation Officer and State Historic Preservation Officer will be conducted, when necessary, to determine the appropriate action to stop the deterioration of the site, provide mitigation, or, in the case of criminal removal or damage to site materials, determine the appropriate legal action to be taken.

A long term monitoring program will be established for the four designated Areas of Critical Environmental Concern containing cultural resources values: 1) Beaverhead Rock; 2) Everson Creek; 3) Muddy Creek/Big Sheep Creek; and 4) Virginia City. The long term monitoring program will include the visitation of a representative sample of cultural resource values within each of the designated ACECs to establish baseline information on the current condition of cultural resource values. Once the baseline condition as-

essment information has been compiled, a minimum of one of each of the four ACEC's will be monitored on an annual basis to identify any potential adverse impacts that might occur and identify trends in resource condition and/or deterioration, and to determine whether any actions taking place in the area are causing detrimental changes to the cultural values deemed relevant and important. Any changes will be noted and recorded in the cultural resource data base and reported to the Field Manager.

#### **Goal 2**

A periodic review of the cultural resource program will be conducted to ensure that the program is meeting established parameters for proactive cultural resources inventory under Section 110 of the National Historic Preservation Act.

The number of acres inventoried by BLM under Section 110 will be reported in the Annual Program Summary and Planning Update.

#### **Goal 4**

The number of outreach programs and partnership projects conducted on an annual basis will be reported in the Annual Program Summary and Planning Update.

#### **Goal 5**

A minimum of one "face-to-face" project coordination and general consultation meeting will be held on an annual basis with the appropriate representatives of the both the Confederated Salish and Kootenai Tribes of the Flathead Reservation, and the Shoshone-Bannock Tribes of the Fort Hall Reservations. Consultation meetings will be held with the appropriate representatives of other tribes as requested or as deemed necessary. Additional project specific coordination will be conducted as necessary, particularly for projects involving timber sales, land exchanges, oil and gas development, etc., which will also involve notification by mail and telephone conversation. The appropriate tribal representatives will also be maintained on the Field Office NEPA and project notification mailing lists.

## **ECONOMICS**

### **Goal**

Provide for a diverse array of stable economic opportunities in an environmentally sound manner.

### **Action**

- 1 Evaluate and disclose impacts of project proposals on a case-by-case basis when it appears actions taken by the BLM Dillon Field Office have the potential to affect economic conditions.

### **Monitoring**

BLM records will be used to determine the amounts of commodities generated from BLM lands providing economic

benefit (AUMs, board feet, etc.). The recreation management information system and other site-specific information will be used to estimate visitor use levels. Employment levels in the Dillon Field Office will be tracked using BLM payroll records. These numbers will be reported in the Annual Program Summary and Planning Update.

## ENVIRONMENTAL JUSTICE

### Goal

Identify and remediate to the extent possible disproportionate negative effects to minority or low income populations per Executive Order 12898 titled "*Federal Action to Address Environmental Justice in Minority Populations and Low-Income Populations.*"

### Action

- 1 Evaluate and disclose impacts of project proposals on a case-by-case basis and where practical, avoid consequences that place a disproportionate share of negative environmental consequences on any particular populations covered by EO 12898.

### Monitoring

The number and type of actions projected to result in disproportionate negative effects to minority or low income populations will be reported in the Annual Program Summary and Planning Update. This information will be identified from environmental documents completed for actions in the planning area.

## FIRE AND FUELS MANAGEMENT

The terminology used in this section has been adjusted from the terminology in the Draft and Proposed RMPs to be consistent with common language developed by the National Fire and Aviation Executive Board. This terminology provides consistency with interagency federal wildland fire policy and related documents. As a result, the section is organized differently than presented in the Proposed RMP/Final EIS, but contains the same goals, objectives, allocations, and management actions.

There are three distinct types of wildland fire, including wildfire, wildland fire use, and prescribed fire. Figure 2 depicts the relationship between these terms, which are defined as follows:

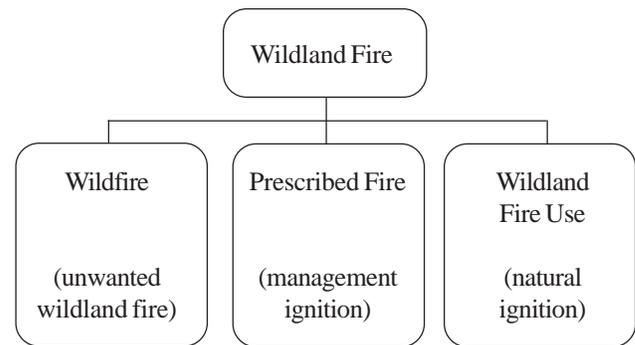
**Wildland Fire.** Any non-structure fire that occurs in the wildland.

**Wildfire.** An unplanned, unwanted wildland fire, including unauthorized human-caused fires, escaped wildland fire use events, escaped prescribed fire projects, and all other wildland fires where the objective is to put the fire out.

**Wildland Fire Use.** The application of the appropriate management response to naturally ignited wildland fires to accomplish specific resource management objectives in pre-defined designated areas outlined in Fire Management Plans.

**Prescribed Fire.** Any fire ignited by management actions to meet specific objectives. A written, approved prescribed fire plan must exist, and NEPA requirements must be met, prior to ignition.

**Figure 2**  
**Relationship of Wildfire, Prescribed Fire, and Wildland Fire Use as part of overall Wildland Fire**



## Wildland Fire

### Goal 1

Provide the appropriate management response on all wildland fires, with an emphasis on firefighter and public safety. When assigning priorities, decisions will be based on relative values to be protected commensurate with fire management costs.

### Allocations

Manage wildland fire in the following areas/FMZs covering approximately 37,573 acres of public land according to Category A provisions:

- Beaverhead/Jefferson Valleys
- Madison Valley

Wildfire is not desired in these areas. The fire management emphasis should be placed on prevention, detection, rapid response, use of appropriate suppression techniques and tools, and non-fire fuels treatment. Fire suppression may be required to prevent unacceptable resource damage or to prevent loss of life and property. Emphasis should be focused on those actions that will reduce unwanted ignitions and reduce losses from unwanted wildfires.

Manage wildland fire in the following areas/FMZs covering approximately 72,867 acres of public land according to Category B provisions:

- Beaverhead Mountains
- Big Sheep/Medicine Lodge Back Country Byway

Unplanned fire is likely to cause negative effects, but these effects can be mitigated or avoided through fuels management (e.g., prescribed fire), prevention of human caused fire, or other strategies. Emphasize prevention/mitigation programs that reduce unwanted fire ignitions and resource threats. For unplanned wildfire, suppression is the objective for this category. Fire and non-fire fuels treatments are utilized to reduce the effects of unplanned wildfire. Restorative treatments may consist of multiple non-fire treatments before the use of fire will be considered.

Manage wildland fire in the following areas/FMZs covering approximately 776,925 acres of public land according to Category C provisions:

- Big Hole River Corridor
- Blacktail Mountains
- Blacktail/Horse Prairie
- Centennial
- East Madison
- Gravelly Mountains
- McCartney/Rochester
- SE Foothills/Pioneers
- Sweetwater/Ruby
- Tendoy Mountains
- Tobacco Root Mountains

Fire is desired to manage ecosystems but there are significant constraints that must be considered for its use. These constraints could include critical wildlife habitat, air quality or T&E species. Resource considerations could be described in terms of maximum acreage, time of year or as burned acres per decade from all types of fire. These areas receive lower suppression priority in multiple wildfire situations. Fire and non-fire fuels treatments may be utilized to ensure constraints are met or to reduce any hazardous effects of unplanned wildfire.

Manage wildland fire in the following area/FMZ covering approximately 13,665 acres of public land according to Category D provisions:

- North Rubys

Fire is desired, and there are no constraints associated with resource conditions or social, economic, or political considerations (e.g., where natural and management-ignited fire may be used to achieve desired objectives, such as to improve vegetation or watershed condition). These areas offer the greatest opportunity to take advantage of the full range of options available for managing wildfire under the appropriate management response.

Map 13 depicts the Fire Management Zones (FMZs) and shows the locations of public land by category. FMZ descriptions are found in Appendix D.

## Actions

- 1 Implement fire preparedness, prevention, and suppression on BLM land through the interagency offset and six party fire protection agreement giving responsibility to the Beaverhead-Deerlodge National Forest and the DNRC.
- 2 Continue to implement an aerial detection plan in cooperation with other fire management agencies in the area.
- 3 Use of retardant in Wilderness Areas or Wilderness Study Areas (WSA) would be avoided and would require line officer approval.
- 4 Use of heavy equipment would be restricted to areas outside of Wilderness or WSAs.
- 5 Minimum Impact Suppression Tactics would be used when working in WSAs or Wilderness areas, following the *Interim Management Policy and Guidelines for Lands Under Wilderness Review* (H-8550-1).
- 6 Manage naturally ignited wildland fires in the Bear Trap Unit of the Lee Metcalf Wilderness Area under the prescription guidelines established in the Bear Trap Unit of the Lee Metcalf Wilderness Area Fire Management Plan.
- 7 Prioritize fire management activities by their risk to life and property across the planning area. Fires that are adjacent or near wildland urban interface will have the highest priority for fire suppression.
- 8 Maintain the direction for fire management to protect other resource values provided in the BLM Statewide Fire Management Plan/ Environmental Assessment Plan Amendment for Montana and the Dakotas (USDI-BLM 2003b).

## Goal 2

Restore and maintain desired ecological conditions and fuel loadings through use of prescribed fire, wildland fire use, and other treatment methods.

## Actions

- 1 Place priority on fuels reduction in wildland urban interface areas. Prioritize treatments by comparing historical fire regimes and current fire severity. Focus management on maintaining fire dependent ecosystems and restoring those outside their natural balance through mechanical, chemical, and prescribed fire treatments.
- 2 Use both prescribed fire and mechanical treatments to treat conifer encroachment in the non-forest habitat types, for aspen restoration and as a post-harvest treat-

ment in timber harvest areas. See the *Rangeland Vegetation* and *Forest and Woodland Vegetation sections for treatment proposals and acres.*

- 3 Allow the use of prescribed fire and associated tools (including mechanical treatments if necessary) in warm and dry forested habitat types and conifer encroachment within Wilderness Study Areas where it is determined wilderness values would be enhanced. Use of prescribed fire and associated tools in WSAs would be limited to areas where fire history evidence correlates to historically frequent fire events. An additional condition would be that treatment result in fuel configurations that would allow the potential to effectively manage the movement of fire if it were to move out of the WSA. Subsequent fire suppression activities would then be limited to locations outside the WSA except where emergencies threaten life or adjacent private lands.
- 4 Follow the *Interim Management Policy for Lands Under Wilderness Review* (H-8550-1), and restrict equipment use in Wilderness and Wilderness Study Areas in accordance with minimum impact suppression tactics.
- 5 Coordinate all vegetation treatment projects using prescribed fire with FWP and adjacent landowners.
- 6 Develop burn plans for all prescribed burn treatments and include incident and cumulative air quality considerations, as well as other resource considerations.

### **Goal 3**

Use rehabilitation to mitigate the adverse effects of fire on the soil, vegetation, and water resources in a cost effective manner.

### **Actions**

- 1 Consider if emergency fire rehabilitation is necessary following a wildland fire, depending on the situation.
- 2 If necessary, pursue funding and follow the process outlined in BLM's Emergency Fire Rehabilitation Handbook (H-1742-1) and Appendix E. Separate environmental analysis will only be completed for emergency fire rehabilitation projects that are outside the scope of activities described in **Appendix E.**

### **Monitoring**

#### *Goal 1*

Monitoring will determine whether fire management strategies, practices, and activities are meeting resource management objectives and concerns. Fire management plans and policies will be updated as needed to keep current with national and state fire management direction. Scheduled program reviews (post-season fire review) will be conducted

to evaluate fire management effectiveness in meeting goals and to re-assess program direction.

#### *Goal 2*

Pre-fire condition and post-fire effects will be determined by monitoring vegetative response to treatments and progress towards meeting objectives. Monitoring methods may include fuels and vegetation transects, photo points, density, cover and frequency plots, and ocular estimates. As available, applicable remote sensing data will also be incorporated into ecological condition monitoring. The number of acres in Condition Class 1, 2, and 3 will be re-evaluated during the watershed assessment process, and tracked and reported in the Annual Program Summary and Planning Update.

#### *Goal 3*

Wildfire rehabilitation effectiveness monitoring studies will be encouraged to determine whether emergency rehabilitation objectives are met. Monitoring requirements and methods will be project specific.

## **FISH and SPECIAL STATUS FISH**

### **Goal 1**

Manage habitat for resident coldwater species that are of high economic, social, or scientific values.

### **Goal 2**

Ensure that aquatic habitat is of suitable quality to support a diversity of plant and animal communities.

### **Objectives (Desired Future Conditions, apply to all Goals)**

Streams have sufficient flows, provide habitat diversity, and exhibit conditions that support coldwater fisheries, including:

- A diversity of instream habitat structure is present
- Composition and quantity of streambed materials are appropriate for site potential
- Riparian vegetation and stream channel morphology contribute to maintaining appropriate water temperatures (generally <70 degrees F).
- Macroinvertebrate diversity and abundance reflect high water quality.

### **Actions**

- 1 Continue or initiate fish habitat inventory, survey and monitoring to document and monitor trends in fishery habitat.
- 2 Use the format developed in conjunction with the Beaverhead-Deerlodge National Forest (see Appendix F) to complete biological evaluations for projects to determine effects on special status species.

- 3 Coordinate with appropriate entities and agencies, especially FWP and adjoining landowners, as opportunities to enhance fish habitat are identified.
- 4 Coordinate with FWP on fisheries introduction proposals and concerns over fishing regulations.
- 5 Manage fish habitat to achieve the *Western Montana Standards for Rangeland Health*. In addition, manage habitats along streams designated as Class 1 (blue ribbon) fisheries and those containing special status species to achieve potential channel types and dimension or show an upward trend within 15 years with the intent of enhancing fish habitat (see Map 14, oversized)
- 6 Initiate habitat restoration on fishery streams that are not in proper functioning condition. Place top priority for habitat restoration and improvement of habitats supporting arctic grayling and habitats containing 99 percent and above genetically pure westslope cutthroat trout. Place next priority on habitats that support from 90 up to 99 percent genetically pure westslope cutthroat trout, Class 1 (blue ribbon) streams, and other fisheries, respectively.
- 7 Implement habitat improvement projects where site-specific assessments have identified habitat concerns on fishery streams. Focus on projects to increase large woody debris in deficient streams to improve pool and spawning habitat components, but also consider other types of projects to improve habitat.
- 8 Encourage compatible maintenance work on irrigation diversion structures to reduce fish loss.
- 9 Coordinate with private entities to modify dams or outlets on Axolotl Lake, Reservoir Lake, and Twin Lakes that will maintain a residual pool and prevent complete drainage.
- 10 Coordinate with FWP to manage beaver where site-specific assessments have identified concerns with beaver presence or absence in relation to fish habitat. No active beaver dam removal or beaver introductions would occur without coordination with FWP.
- 11 Pursue water leasing and improved water management to benefit fisheries values in coordination with FWP on Class 1 (blue ribbon) streams with a priority placed on westslope cutthroat trout and fluvial arctic grayling streams (see Map 14, oversized).
- 12 Improve the habitat quality in Sheep Creek for production of game fisheries resulting in improved fish condition and increased numbers. Revise the Sheep Creek Aquatic Habitat Management Plan as necessary and implement the remaining habitat objectives within five years.
- 13 Ensure that habitat is provided for special status species, and that proposed actions do not jeopardize the continued existence of a threatened or endangered species, or cause its habitat to be adversely modified or destroyed.
- 14 Consult with USFWS when impacts are anticipated to threatened or endangered species or designated habitat.
- 15 Cooperate in implementation and monitoring of recovery plans, State of Montana management plans, and conservation strategies for all listed, recently delisted, and candidate species.
- 16 Implement management plans prepared for species not yet delisted in coordination with the State of Montana and other appropriate agencies once the species is delisted by the USFWS.
- 17 Enhance, restore and maintain habitat conditions and availability for special status species and prevent all avoidable loss of habitat.
- 18 Manage special status species habitats and populations using multi-scale assessments to identify current conditions, risks and opportunities.
- 19 Use individual species conservation strategies to design habitat strategies that will promote conservation of as many other wildlife species as possible.
- 20 Treat sensitive species as candidate species for project impact analysis.
- 21 Complete biological evaluations for projects for all special status plant and animal species using the joint format developed in conjunction with the Beaverhead-Deerlodge National Forest (see Appendix F).
- 22 Consider conservation strategies for sensitive species not listed under the Endangered Species Act when issuing land use authorizations.

### **Goal 3**

Ensure the long-term, self-sustaining persistence and maintain the genetic diversity of the individual populations of westslope cutthroat trout in the Dillon Field Office.

### **Actions**

- 1 Participate in implementation of the MOU and Conservation Agreement for WCT in Montana and in the

cost share agreement for WCT inventories and genetic testing. See Appendix G for additional information.

- 2 Manage habitats along streams containing westslope cutthroat trout (90 percent genetic purity and above) to achieve potential channel types and dimension or show an upward trend within 15 years with the intent of enhancing fish habitat.
- 3 Use any and all management tools available to protect concentrated westslope cutthroat trout spawning areas in streams with 99 percent and above genetically pure populations.
- 4 Initiate habitat restoration on fishery streams that are not in proper functioning condition. Place top priority for habitat restoration and improvement of habitats supporting arctic grayling and habitats containing 99 percent and above genetically pure westslope cutthroat trout. Place next priority on habitats that support from 90 up to 99 percent genetically pure westslope cutthroat trout, Class 1 (blue ribbon) streams, and other fisheries, respectively.
- 5 Encourage compatible maintenance work on diversion structures to reduce WCT loss in irrigation ditches.
- 6 Pursue water leasing and improved water management to benefit fisheries values in coordination with FWP with a priority placed on westslope cutthroat trout and fluvial arctic grayling streams.
- 7 Require bonding and full restoration of disturbed habitat to proper functioning condition where surface disturbing mineral exploration or development takes place within 100 feet of the centerline of any stream containing westslope cutthroat trout with a genetic purity of 90 percent or greater. Require a Plan of Operation before mineral production activities are initiated in these same areas.

#### **Goal 4**

Ensure the long term self-sustaining persistence of fluvial and adfluvial arctic grayling in the Dillon Field Office area.

#### **Actions**

- 1 Participate in implementation of the Restoration Plan for fluvial arctic grayling.
- 2 Manage habitats along streams containing arctic fluvial grayling to achieve potential channel types and dimension or show an upward trend within 15 years with the intent of enhancing fish habitat.
- 3 Initiate habitat restoration on fishery streams that are not in proper functioning condition. Place top priority

for habitat restoration and improvement of habitats supporting arctic grayling and habitats containing 99 percent and above genetically pure westslope cutthroat trout. Place next priority on habitats that support from 90 up to 99 percent genetically pure westslope cutthroat trout, Class 1 (blue ribbon) streams, and other fisheries, respectively.

- 4 Develop a cooperative agreement with FWP for adequate protection and access to the fluvial arctic grayling brood pond within the Axolotl Lakes area.
- 5 Encourage compatible maintenance work on diversion structures to reduce fluvial arctic grayling loss in irrigation ditches.
- 6 Pursue water leasing and improved water management to benefit fisheries values in coordination with FWP with a priority placed on westslope cutthroat trout and fluvial arctic grayling streams.

#### **Monitoring**

Greenlines, cover board studies, and fish habitat assessments will be conducted at least every 10 years on westslope cutthroat trout and other fishery streams to track changes in streamside vegetation composition. This monitoring will be supplemented with data collected for riparian and wetland monitoring to determine if goals and objectives are being met.

BLM will continue to cooperate with Montana FWP and the Forest Service to sample westslope cutthroat trout streams under BLM administration at least once every 10 years to monitor populations. The westslope cutthroat trout streams visited each year will be tracked and reported in the Annual Program Summary and Planning Update, as will the number of habitat restoration or improvement projects initiated.

## **FOREST AND WOODLAND VEGETATION, AND FOREST PRODUCTS**

#### **Goal 1**

Manage forests and woodlands to sustain their vitality, health and diversity.

#### **Objectives (Desired Future Conditions, after 20-50 years of management)**

Curl leaf mountain mahogany occupy historic range and are in stable or improving condition.

Douglas-fir/sagebrush interface represents an open savannah aspect. Rocky Mountain juniper and limber pine are restricted to historic sites where wildland fire frequency is

limited by lower site productivity and sparse fuels. Both species occur in low densities in association with vigorous shrubs, grasses, and forbs (where site potential permits).

Douglas-fir forests contain healthy stands of site-appropriate species. Stands are relatively open, with tree density within site capacity. Low intensity fires can be accommodated without excessive loss of trees, and insect and disease occurrence are at endemic levels. Late successional characteristics will be maintained or restored through management.

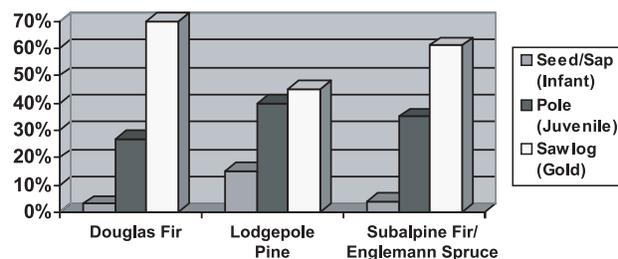
Lodgepole pine and spruce/fir forests are represented by a diversity of age classes and structure.

White bark pine forests occupy historic range and are in stable or improving condition.

Quaking aspen groves occupy historic range and are in stable or improving condition. Aspen stands contain multi-aged stems and adequate regeneration to perpetuate the stand. Age classes are mostly less than 100 years old with good understory diversity.

Figure 3 shows the approximate structure distribution of the major species groups in the Dillon Field Office. The largest proportion is sawlog (mature) or "Gold" size classes. The "Gold" size class includes some younger, more uniform stands, but is predominantly composed of stands with late successional characteristics. Late successional characteristics will vary considerably by forest type, but generally include: large trees for species and site; wide variation in tree sizes and spacing; accumulations of large, dead, standing and fallen trees (except in forest types characterized by frequent, low intensity fires); decadence in the form of broken or deformed tops or bole and some root decay; multiple canopy layers (in some forest types); and canopy gaps and understory patchiness. The large amount of land area in the "Gold" size class reflects a lack of major fire or human generated disturbances in the past 80 to 100 years. The smaller proportion of pole size or "Juvenile" structures reflects the influx of in-growth that began with the advent of fire suppression from the late 1800s. "Juvenile" size classes generally consist of younger age-class trees in a single canopy layer, have more uniform spacing, less down woody debris from the existing stand (may have some residual woody debris on the forest floor from the pre-existing stand), and fewer canopy gaps than "Gold" size class stands. The smallest size class, seedling/sapling or "Infant" indicates the relatively small proportion of lands in the planning area that have been treated by either single age class harvest activity or have been subjected to stand replacing wildland fire events or other disturbances. "Infant" size classes have little to no down woody debris from the existing stand, but may have some residual woody debris on the forest floor from pre-existing stands.

**Figure 3**  
**Forest Structure Distribution of Major Species Groups in the Planning Area**



### Allocations

Manage 35,000 acres of forest and woodland vegetation to improve forest health and enhance habitat.

- Manage 23,000 acres of non-aspen forest and woodland vegetation to meet objectives, initially focusing on three geographic areas: the southern Tobacco Roots, southern Ruby Mountains, and Barton/Idaho Gulch (see Map 15, oversized).
- Manage 12,000 acres with aspen (primarily in but not limited to, the southern portions of the field office) to meet objectives in restoring aspen communities.

### Actions

- 1 Conduct inventory efforts with a target completion date of 2020. Convert existing data into FORVIS as current policy directs, or other systems as necessary throughout the life of the plan.
- 2 Coordinate vegetation planning with managers of lands adjacent to site-specific proposals for a collaborative approach and coordinate all proposed vegetation treatment projects with FWP in consideration of wildlife habitat concerns.
- 3 Conduct no mechanical treatments on slopes of 70 percent or greater.
- 4 Treat up to 4,000 acres of the 23,000 acres in the Cool and Moist habitat type in the following geographic areas (see Map 15, oversized):
  - southern Tobacco Roots
  - southern Ruby Mountains
  - Barton/Idaho Gulch areas

Cool and Moist habitat types will be managed through clearcutting, clearcutting with reserve trees, patch clearcutting, and/or thinning in lodgepole pine stands or mixed lodgepole pine conifer stands. Partial cutting techniques will be emphasized when possible over clearcutting in lodgepole pine stands. The prescription

emphasis in Cool and Moist habitat types will be on reintroducing a diversity of age classes where this is lacking. Selection cutting, individual selection, group selection, thinning and/or seed tree cutting will be used in mid to higher elevation Douglas Fir and some other conifer stands such as mixed Douglas Fir, sub-alpine fir and Engelmann spruce stands.

- 5 Treat up to 10,000 acres of the 23,000 acres in the Warm and Dry and Warm and Very Dry habitat types in the following geographic areas, and emphasize whitebark pine treatment:

- southern Tobacco Roots
- southern Ruby Mountains
- Barton/Idaho Gulch areas

Warm and Dry, Warm and Very Dry (including woodlands), and Warm and Moist habitat types will generally be thinned from below to remove smaller diameter trees and or receive a commercial thinning to remove both small and intermediate size trees. Some removal of the larger diameter classes will be allowed but not emphasized via individual tree selection prescription.

- 6 Once treatments in focus areas have been implemented, treat up to 9,000 acres of the 23,000 acres in Warm and Dry, Warm and Very Dry, and Warm and Moist habitat types outside of the three geographic focus areas. Place priority on treatment of urban interface areas. Emphasize the treatment of stands that have missed two or more fire cycles (Condition Class 3) and use post-activity prescribed fire to reduce fuel levels.

Warm and Dry, Warm and Very Dry (including woodlands), and Warm and Moist habitat types will generally be thinned from below to remove smaller diameter trees and or receive a commercial thinning to remove both small and intermediate size trees. Some removal of the larger diameter classes will be allowed but not emphasized via individual tree selection prescription.

- 7 Continue long-term conifer management on the 23,000 treated acres outside of aspen areas. Manage conifer regeneration in lodgepole pine stands primarily by natural means unless the seed source is lost to unanticipated complications in harvest operations or intense long-duration wildfire that consumes the seed source. Where natural regeneration is lacking in other conifer types such as Douglas-fir, implement planting in accordance with bureau policy. Replant to reflect historic stocking rates. Monitor regeneration for stand re-establishment and protect it as necessary from grazing pressure.

- 8 Treat an estimated 12,000 acres to restore aspen in areas primarily located in, but not limited to, the southern portions of the field office. Follow up with a variety of methods including mechanical treatments, fire, and other appropriate tools.

a. Exclude grazing on aspen restoration treatments of 100 acres or less until aspen regeneration is a minimum of five feet tall on average.

b. Incorporate prescribed fire into all management activities where possible to maximize aspen regeneration.

c. Conduct future analysis to remove reinvading conifers from aspen restoration areas in order to maintain treated stands.

- 9 Implement sanitation cutting in all areas except where prohibited (e.g. WSAs) where insect infestations such as pine beetle and spruce budworm have the potential to go from endemic to epidemic proportions. Consider treatment of other insect infestations in forest and woodland areas on a case-by-case basis.

- 10 Consider salvage harvest on a case-by-case basis in all areas except where it is prohibited (e.g., Wilderness Study Areas) and conduct in a manner commensurate with forest health guidance and in consideration of other resource values. Analyze the salvage of forest products resulting from wildfire, prescribed fire, forest insect/disease, or weather induced events.

- 11 Implement conservation measures from the Lynx Conservation Assessment and Strategy, including the requirement not to change more than 15 percent of lynx habitat within an LAU to unsuitable condition within a 10-year period. See additional conservation measures in Appendix W.

- 12 Provide wood products as a benefit of forest and woodland treatments when feasible and in consideration of other resource concerns.

- 13 Consider stewardship opportunities on a case-by-case basis.

- 14 Allow the use of prescribed fire and associated tools (including mechanical treatments if necessary) in warm and dry forested habitat types and conifer encroachment within Wilderness Study Areas where it is determined wilderness values would be enhanced. Use of prescribed fire and associated tools in WSAs would be limited to areas where fire history evidence correlates to historically frequent fire events. An additional condition would be that treatment result in fuel configurations that would allow the potential to effectively manage the movement of fire if it were to move out of the WSA. Subsequent fire suppression activities would then be limited to locations outside the WSA except where emergencies threaten life or adjacent private lands.

- 15 Maintain or restore late successional characteristics where large trees exist and the stand exhibits some late successional characteristics. (See Figure 2 for the approximate current structure distribution of the major species groups in the Dillon Field Office and associated definitions).



*Meadow with aspen and Douglas-fir*

## **Goal 2**

Provide opportunities for traditional and nontraditional uses of forest products by incorporating sound ecological principles while contributing to the economic stability of the community.

### **Allocations**

Manage for a Probable Sale Quantity (PSQ) of an estimated at 3.6 million board feet of wood products per year within the 23,000 acres of non-aspen forest and woodland vegetation being treated to improve forest health and enhance habitat (see *Allocation* under Goal 1 in this section).

Manage for a Probable Sale Quantity (PSQ) of an estimated additional 3.0 million board feet of conifer wood products from, in, and around aspen stands (12,000 acres) until the stands are restored. Conduct analysis in out-years to maintain treated aspen stands through removal of reinvading conifers.

**Note: A PSQ is *not* a commitment to cut a specific level of volume every year, but is an estimate of the allowable harvest level that could be maintained if a schedule is followed without full consideration of all environmental factors at this level of planning.**

### **Actions**

- 1 Conduct inventory efforts with a target completion date of 2020. Convert existing data into FORVIS as current policy directs, or other systems as necessary throughout the life of the plan.

- 2 Coordinate with appropriate entities (e.g., adjacent land managers, FWP, private property owners, etc.) in consideration of forest health and/or other administrative concerns.
- 3 Conduct no mechanical treatments on slopes of 70 percent or greater.
- 4 Continue long-term conifer management on the 23,000 treated acres outside of aspen areas. Manage conifer regeneration in lodgepole pine stands primarily by natural means unless the seed source is lost by unanticipated complications in harvest operations or intense long-duration wildfire that consumes the seed source. Where natural regeneration is lacking in other conifer types such as Douglas-fir, implement planting in accordance with bureau policy. Replant to reflect historic stocking rates. Monitor regeneration for stand re-establishment and protect it as necessary from grazing pressure.
- 5 Implement sanitation cutting in all areas except where prohibited (e.g. WSAs) where insect infestations such as pine beetle and spruce budworm have the potential to go from endemic to epidemic proportions. Consider treatment of other insect infestations in forest and woodland areas on a case-by-case basis.
- 6 Consider salvage harvest on a case-by-case basis in all areas where it is not prohibited (e.g., Wilderness Study Areas) and conduct in a manner commensurate with forest health guidance and in consideration of other resource values. Analyze the salvage of forest products resulting from wildfire, prescribed fire, forest insect/disease, or weather induced events.
- 7 Implement conservation measures from the Lynx Conservation Assessment and Strategy, especially during pre-commercial thinning operations, including the requirement not to change more than 15 percent of lynx habitat within an LAU to unsuitable condition within a 10-year period. See additional conservation measures in Appendix W.
- 8 Consider stewardship opportunities on a case-by-case basis.
- 9 Provide wood products as a benefit of forest and woodland treatments when feasible and in consideration of other resource concerns.
- 10 Provide for sales of small quantities of forest products, but especially encourage these small quantity sales in the same geographic areas as commercial sales. However, timing of these opportunities will have to be such that contractor/public user conflicts are kept to a minimum.

- 11 Provide the opportunity for both traditional and non-traditional use of forests and woodlands.
- 12 Consider removal of suitable biomass (non-commercial size products) on a case-by-case basis.
- 2 Withdraw from mineral entry the following lands:
  - a. Wedding Ring Rock (also known as Lime Kiln Arch)
  - b. Squirrel Rock
  - c. Road Agents Rock.

### ***Monitoring***

Pre-Treatment: Data will be collected within forest stand(s) or woodlands using the FORVIS data collection format. In commercial treatment units, the pre-treatment basal area of the live and dead component, the average stand diameter-at-breast height, the average stand total height, and fuel loading information will be collected. Estimated volume per acre or biomass tons per acre will be obtained, if applicable, in stands that will be treated. In commercial and non-commercial treatment units, photo point(s) will be established to show approximate percent cover, habitat types, and occurrence of insect infestations/diseases

Post-Treatment: Measurements as described above will be obtained within two years after project implementation on any given unit to evaluate if stand objectives were reached. Representative sample(s) of established photo points will be revisited on a 10 year cycle to document longer term trends.

The number of acres treated and number of small sale/public use permits issued each fiscal year will be reported in the Annual Program Summary and Planning Update.

## **GEOLOGIC RESOURCES**

### ***Goal***

Provide opportunities for use of the geology of the area while protecting resource values.

### ***Allocations***

Manage the following geologic features and associated lands (see Map 16, oversized, for locations) as unavailable for locatable mineral entry once formal withdrawal is processed and approved:

- Wedding Ring Rock (also known as Lime Kiln Arch) (10 acres)
- Squirrel Rock (10 acres)
- Road Agents Rock (10 acres)

### ***Actions***

- 1 Post signs at the following geologic features:
  - a. Wedding Ring Rock (also known as Lime Kiln Arch)
  - b. Squirrel Rock
  - c. Road Agents Rock

- 3 Identify additional protective measures on a case-by-case basis as necessary or when reviewing project proposals to protect Wedding Ring Rock (Lime Kiln Arch), Squirrel Rock, and Road Agents Rock.
- 4 Manage the geologic features formed by Nemesis Mountain and Sheep Mountain as part of the Centennial Mountains WSA.
- 5 Protect the relevant and important geological values and associated educational values in the Block Mountain ACEC (see Map 5) with the following special management:
  - a. Evaluate the density and placement of any facilities or land use authorizations proposed in the area and require measures to protect the integrity of the geologic features.
  - b. Require permits for educational uses within the area.
  - c. Develop educational materials describing access to the area and the features within and appropriate use protocols.
  - d. Evaluate all mineral use proposals within the area and identify and mitigate impacts to important features in the area.

### ***Monitoring***

Monitoring of the geologic resources will be done on a periodic basis. Inspections will include checking for destruction of geologic features, the condition of posted signs, for litter, and for any other problems. Monitoring will also include checking access routes (where applicable) to the site for road conditions, locked gates and other obstructions. Any significant problems will be reported to the Field Manager.

Visitation of geologic resources will be reported in the Annual Program Summary and Planning Update.

## **HAZARDOUS MATERIALS**

### ***Goal 1***

Protect humans and the environment from exposure to hazardous materials.

### ***Actions***

- 1 Comply with all appropriate laws and regulations regarding hazardous materials.
- 2 Do not permit unauthorized storage, treatment, or disposal of hazardous waste on public lands

- 3 Apply special stipulations to comply with appropriate law, regulation, and policy when the use or storage of hazardous materials is authorized (i.e., in mining operations or other types of commercial activities).
- 4 Use standard operating procedures to respond to hazardous materials incidents on public land.
- 5 Conduct cleanup and reclamation in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan and the National Environmental Policy Act.

**Monitoring**

Site clean-ups will be monitored to protect and safeguard human health, prevent/restore environmental damage and to limit the BLM's liability. The performance of the clean-up contractor for all release on public lands will be monitored to ensure full compliance and damaged land restoration. HAZMAT monitoring data will be kept in monitoring files and in the BLM's site cleanup data base. All data will be collected at the time and place of the incident or until the cleanup is completed and there is no future threat to human health or environment.

The number of site cleanups (if any) will be reported in the Annual Program Summary and Planning Update.

**INDIAN TRUST RESOURCES**

There are no formal Indian Trust Resources in the planning area. Refer to the *Cultural Resources* and *Tribal Treaty Rights* sections for discussions on those issues.

**LANDS AND REALTY**

**Land Use Authorizations**

Land use authorizations include various authorizations and agreements to use BLM lands such as right-of-way grants, road use agreements and associated temporary use permits under several different authorities; leases, permits, and easements under section 302 of the Federal Land Policy and Management Act of 1976 (FLPMA); airport leases under the Act of May 24, 1928; and Recreation and Public Purposes (R&PP) leases. R&PP transfers are handled below under the *Land Ownership Adjustment* section.

**Goal 1**

Meet public needs for use authorizations such as rights-of-way, leases, and permits while minimizing adverse impacts to other resource values.

**Table 4  
Communication Sites, Locations, and Designated Use Categories**

<i>Communication Site</i>	<i>Legal Description ** (Principal Meridian, Montana)</i>	<i>Designated Use</i>
Armstead Mountain	SE1/4 NE1/4, Sec.34., T.10S, R.11W	Low Power; Non-Broadcast
Pipe Organ	SW1/4 NE1/4, Sec.4, T..9S, R.10W	Low Power; Non-Broadcast
Maurer Mountain	NE1/4 NW1/4, Sec.29, T.10S, R..9W	Low Power; Broadcast and Non-Broadcast
Bear Trap	SE1/4 NE1/4, Sec.18, T.4S, R.1E	Low Power; Non-Broadcast
Baldy Ridge	NE1/4 SE1/4, Sec.26, T.7S, R.3W	Government Use Only
Badger Pass (Bannack)	NE1/4 NW1/4, Sec.22, T.7S, R.11W	Low Power; Non-Broadcast, (Existing Facility Only)
Barton Gulch	SE1/4 SW1/4, Sec.12, T.7S, R.4W	Resource Monitoring
Lakeview Ridge	Lot 4 of Sec.26 and Lot 1 of Sec.27, T.14S, R.2W	Resource Monitoring
Monida Pass	NE1/4 NE1/4, Sec.25, T.14S, R.7W	Resource Monitoring
VC Hill	NE1/4 SW1/4, Sec.32, T.6S, R.2W	Low Power; Non-Broadcast

\*\* These legal descriptions do not delineate the boundaries of the right-of-way use areas, but give approximate locations. Boundaries of the use areas are/will be defined in individual site plans.

## Allocations

Manage five (5) areas as designated right-of-way use areas for communication sites (see Map 17):

- Armstead Mountain
- Maurer Mountain
- Pipe Organ
- Bear Trap
- Virginia City Hill.

Encourage (but do not require) applicants to locate within these five designated right-of-way use areas. Require new facilities locating within existing communication site areas (see Map 17) to conform with the designated uses for each respective site (see Table 4).

Manage two of the existing right-of-way corridors delineated in the 1992 "Western Regional Corridor Study" as designated right-of-way corridors where they cross public lands (see Map 17). These corridors are each currently occupied by an electrical transmission line. Nominal corridor width will be 1,320 feet (1/4 mile) on each side of centerline of the existing facilities, except where the alignment forms the boundary of a Special Management Area, where the width will be 2,640 feet (1/2 mile) on the side opposite that boundary. Applicants for electrical transmission lines 69 kV and larger and pipelines 10 inches in diameter and greater will be encouraged to locate such facilities within these two designated corridors.

Manage the Bear Trap Unit of the Lee Metcalf Wilderness and the Beaverhead Rock ACEC as designated right-of-way exclusion areas (see Map 17). No new rights-of-way will be granted in these areas. However, any valid existing rights-of-way will be recognized and holders of such authorizations will be allowed to maintain their facilities.

Manage approximately 123,286 acres within the nine Wilderness Study Areas and the BLM lands along the Lewis and Clark Trail as designated right-of-way avoidance areas where the issuance of new rights-of-way will be avoided unless there are no other options and authorization in any WSA will be consistent with the *Interim Management Policy for Lands Under Wilderness Review* (see Map 17). Valid existing rights-of-way in right-of-way avoidance areas will be recognized and holders of such authorizations will be allowed to maintain their facilities.

## Actions

- 1 Do not require rights-of-way, leases, permits, or easements for those activities that are considered casual use of public lands.
- 2 Analyze requests for land use authorizations on a case-by-case basis and apply mitigation measures as necessary in compliance with the NEPA process.
- 3 Locate new right-of-way facilities within or adjacent to existing rights-of-way, to the extent practical, in or-

der to minimize adverse environmental impacts and the proliferation of separate rights-of-way.

- 4 Follow the *Interim Management Policy and Guidelines for Lands Under Wilderness Review* for land use authorizations requested in Wilderness Study Areas.
- 5 Do not issue land use authorizations for uses which would involve the disposal or storage of materials which could contaminate the land (hazardous waste disposal sites, landfills, rifle ranges, etc.).
- 6 Implement provisions in the latest version of *Suggested Practices for Raptor Protection on Power Lines* (APLIC 1996) and "USFWS Interim Guidance to Avoid and Minimize Wildlife Impacts from Wind Turbines" (USDI-FWS 2003) in the construction and operation of right-of-way facilities.
- 7 Require electric distribution lines to be buried on public lands when feasible when located within one-quarter mile each side of the Madison River in order to preserve scenic quality.
- 8 Allow owners of non-Federal land surrounded by public land managed under FLPMA a degree of access across public land which provides for the reasonable use and enjoyment of the non-Federal land.
- 9 Allow motorized cross-country or route travel on a case-by-case basis with prior written permission of the Field Manager (including casual use letters) in areas closed to motorized travel for travel by entities requiring access to private lands, resources, or legal improvements within or adjacent to closed or limited areas. Access will be allowed to the degree necessary to provide for reasonable use and enjoyment of that property where no reasonable alternatives exist.
- 10 Recognize the use of certain rights-of-way constructed on public lands prior to FLPMA as valid existing rights, even though there are no grant documents of record and the authorities authorizing those uses have since been repealed (e.g., ditches and canals under the Act of July 26, 1866; highways, roads, and trails under R.S. 2477, etc.). However, the processing of R.S. 2477 assertions or claims is deferred pending further direction from the Secretary of the Interior.
- 11 Allow motorized cross-country or route travel without prior permission by lessees and permittees performing administrative functions on public lands within the scope of a permit or lease, including, but not limited to gas or electric utilities monitoring a utility corridor for safety conditions or normal maintenance, accessing a remote communication site for normal maintenance or repair, etc. This provision does not preclude modifying

permits or leases to limit motorized cross-country travel during further site-specific analysis to meet resource management objectives or standards and guidelines.

- 12 Develop site plans for each of the designated communication site use areas and update periodically as necessary. Boundaries of the use areas will be defined by these site plans.
- 13 Group new communication site users into suitable existing sites to reduce impacts and expedite application processing. Encourage applicants for communication site facilities to locate within the five designated use areas. Map 17 shows existing authorized communication sites and designated use areas.
- 14 Require site plans to be completed prior to authorizing any new areas for communication sites. Consider the use of alternative energy sources where electric power is not available.
- 15 Where avoidance areas and designated corridors overlap (e.g., the Lewis and Clark Trail and the designated corridor through the Beaverhead River Canyon), issuance of new rights-of-way and upgrade/expansion of existing rights-of-way will be allowed if mitigative measures can reduce impacts to resources of concern to an appropriate level.
- 16 Provide access across public lands to and along right-of-way corridors and use areas necessary to construct new facilities, except in avoidance areas where access would be considered on a case-by-case basis.
- 17 Permit other uses of right-of-way corridors and use areas to the extent they do not interfere with or preclude the use of these locations for their intended purpose and are consistent with other portions of the plan.
- 18 Abate realty-related unauthorized use through preventing, detecting, and resolving such uses. Upon settlement of trespass liabilities, resolution of the unauthorized use of public lands will be accomplished through termination, authorization, or sale or exchange, as appropriate. Rehabilitate BLM lands affected by unauthorized uses as determined necessary.

### **Monitoring**

Land use authorizations will be monitored both through field examinations to ensure compliance with the terms and conditions of the authorizing document and through the BLM accomplishment tracking process. On-the-ground monitoring will occur immediately upon issuance of the authorization and periodically throughout the life of the authorization. Management, realty personnel, and other key staff members in the Dillon Field Office will meet periodically to review program status and compliance with Goal 1.

The number of use authorizations monitored annually and the number of those in compliance with terms and conditions of the authorization in any given fiscal year will be reported in the Annual Program Summary and Planning Update.

## **Land Ownership Adjustment**

Section 102(a)(1) of FLPMA provides that "...the public lands be retained in Federal ownership, unless as a result of the land use planning procedure provided for in this Act, it is determined that disposal of a particular tract will serve the national interest...". Mineral patents are not considered a land ownership adjustment for the purposes of this plan. Land adjustments often result through land exchanges or sales.

**Land exchanges** are typically processed under the authority of FLPMA and involve the discretionary, voluntary exchange of lands or interest in lands between the Federal government and a non-Federal party. It is required that:

- the Federal and non-Federal lands involved be located in the same state
- the Federal and non-Federal lands be of equal value, or in certain circumstances, approximately equal in value
- exchanges be completed only after a finding that the public interest would be well served

In considering whether an exchange is in the public interest, consideration is given to the opportunity to:

- achieve better management of Federal lands,
- meet the needs of state and local residents and their economies,
- secure important objectives, including but not limited to, protection of fish and wildlife habitats, cultural resources, watersheds, wilderness and aesthetic values; enhancement of recreation opportunities and public access; consolidation of lands and/or interests in lands; consolidation of split estate; expansion of communities; accommodation of land use authorizations; promotion of multiple-use values; and fulfillment of public needs.

In making the public interest determination, there needs to be a finding that:

- the resource values and the public objectives that the Federal lands or interests to be conveyed may serve if retained in Federal ownership are not more than the resource values of the non-Federal lands or interests and the public objectives they could serve if acquired, and
- the intended use of the conveyed Federal lands will not significantly conflict with established management objectives on adjacent Federal lands and Indian trust lands.

**Sales** of public lands are authorized under section 203 of FLPMA and made at not less than fair market value. Public

lands determined suitable for sale are offered only on the initiative of the BLM. Such sales have to meet at least one of the following FLPMA sales criteria:

- Sec. 203(a)(1) – such tract because of its location or other characteristics is difficult and uneconomic to manage as part of the public lands, and is not suitable for management by another Federal department or agency; or
- Sec. 203(a)(2) – such tract was acquired for a specific purpose and the tract is no longer required for that or any other Federal purpose; or
- Sec. 203(a)(3) – disposal of such tract will serve important public objectives, including but not limited to, expansion of communities and economic development, which cannot be achieved prudently or feasibly on land other than public land and which outweigh other public objectives and values, including, but not limited to, recreation and scenic values, which would be served by maintaining such tract in Federal ownership.

The preferred method of sale of public lands is by competitive bidding at public auction. However, modified competitive bidding may be used to protect on-going uses, to assure compatibility of the possible uses with adjacent lands, or to avoid dislocation of existing users. Direct sale may be used when the public lands offered for sale are completely surrounded by lands with one owner and no public access, or where the lands are needed by state or local governments or non-profit corporations, or where necessary to protect existing equities in the lands or resolve inadvertent unauthorized use or occupancy.

## ***Goal 2***

Retain public lands with high resource values in public ownership. Adjust land ownership to consolidate public land holdings, acquire lands with high public resource values, and meet public and community needs.

## ***Allocations***

Make no public lands in the planning area available for disposal under agricultural entries, Indian allotments, or state selections.

**Manage** approximately 142,000 acres as **Category 1 retention lands** (see Map 18, oversized).

Public lands in Category 1 (Congressionally designated wilderness, WSAs, certain developed and dispersed recreation areas, lands acquired using LWCF monies, and certain wildlife sites with substantial capital investment) will not be transferred from BLM management by any method during the life of the plan. Acquisition of lands or interests in lands from willing owners will receive priority if located in or adjacent to public lands in Category 1, providing they meet one or more of the acquisition criteria found in Appendix H.

**Manage** approximately 756,000 acres as **Category 2 retention lands, with limited adjustment** (see Map 18, oversized).

These lands are not available for sale under section 203 of FLPMA, but limited disposal actions may occur. Lands within this category can be exchanged for lands or interests in lands located anywhere within the State of Montana. These lands can also be considered for transfer under the R&PP Act for recreation or public purpose needs on a case-by-case basis as identified by state, local, or other qualifying entities. Grants of public lands to public agencies for airport purposes under the Airport and Airway Improvement Act can be considered on a case-by-case basis. They can also be considered for public agency jurisdictional transfer.

Some public lands in Category 2 may contain significant resource values protected by law or policy. If actions cannot be taken to adequately mitigate impacts from disposal of those lands, those parcels would be retained. Acquisition from willing owners of lands or interests in lands located in or adjacent to Category 2 would be considered in accordance with the Acquisition Criteria found in Appendix H.

**Manage** approximately 4,000 acres as **Category 3 disposal lands** (see Map 18, oversized).

Appendix I identifies the specific parcels available for potential disposal under Category 3. These lands are available for disposal through exchange for lands or interests in lands located anywhere within the Dillon Field Office as well as elsewhere in Montana. These parcels also have been found to potentially meet the sale criteria of section 203(a)(1) of FLPMA and can be made available for sale. However, disposal of Category 3 lands by exchange will have priority over disposal by FLPMA sale. Transfers under the R&PP Act and grants of public lands to public agencies for airport purposes under the Airport and Airway Improvement Act can also be considered on a case-by-case basis. Additionally, public lands within Category 3 can be considered for disposal by public agency jurisdictional transfer.

Some of the Category 3 lands may contain significant resource values protected by law or policy. If impacts from disposal of these lands cannot be adequately mitigated, those parcels must be retained.

## ***Actions***

- 1 Analyze all proposed land ownership adjustment actions in project specific environmental reviews.
- 2 Maintain or improve public access through all land ownership adjustment transactions.
- 3 Consider lands for acquisition only if one or more of the Acquisition Criteria presented in Appendix H applies.

- 4 Acquisitions would only be made on a willing seller basis (with the exception of instances where the acquisition of access to public lands would require the exercise of the right of eminent domain—see Action 13).
- 5 Limit direct purchase of lands to cases where no practical alternatives exist and high public values would be acquired. Such actions must meet the acquisition criteria in Appendix H.
- 6 Consider the need to protect newly acquired lands as part of the analysis prior to acquisition. If withdrawn, manage acquired lands under the terms and conditions of the withdrawal.
- 7 Manage newly acquired lands for the highest potential purpose for which they were acquired. Lands acquired within special management areas with specific Congressional mandates (such as National Trails and Wilderness Areas) will be managed in conformance with established guidelines for those areas. Manage lands acquired within administratively designated special management areas that have fragile or unique resources (such as ACECs and SRMAs) the same as the special management area. Lands acquired without special values or management goals will be managed in the same manner as comparable surrounding public lands.
- 8 Newly acquired lands or interests in lands obtained with LWCF funding or lands acquired within or adjacent to special management areas will become Category 1 lands and managed accordingly. All other newly acquired lands will become Category 2 lands and managed accordingly.
- 9 Parcels of land administered by BLM and discovered through land status updates and corrections will be managed in the same manner as parcels adjacent to or in the vicinity of them in regard to retention or disposal.
- 10 Make land exchange the first priority for both acquisition and for the conveyance into non-Federal ownership of those parcels identified for disposal, except under the following circumstances, when alternative methods could be considered:
  - a. where there is a competitive market situation and multiple entities are interested in a parcel of land
  - b. when resolving inadvertent unauthorized use or occupancy
  - c. when providing for community expansion and development
  - d. when creating facilities or service for public health, safety and welfare
- 11 Generally retain federal minerals underlying non-Federal surface in federal ownership. However, an exchange of this type of mineral estate may be considered on a case-by-case basis if found to be in the public interest. The sale of this type of mineral interest under section 209(b) of FLPMA could be considered if the requirements of this same section were met. There must be a finding that: 1) there are no known mineral values in the land, or 2) that the reservation of the mineral rights in the United States is interfering with or precluding appropriate non-mineral development of the land and that such development is a more beneficial use of the land than mineral development. Such conveyance of mineral interests can only be made to the existing or proposed record owner of the surface upon payment of administrative costs and the fair market value of the interests being conveyed.
- 12 Maintain existing access in conveyance documents associated with land ownership adjustments using appropriate covenant language.
- 13 Consider the exercise of the right of eminent domain for securing access to public lands as an option of last resort in instances where a landowner is unwilling to allow the acquisition of lands or interests-in lands necessary to secure access to public lands.

**Monitoring**

Land ownership adjustment actions will be monitored through the BLM accomplishment tracking process. Management, realty personnel, and other key staff members in the Dillon Field Office will meet periodically to review program status and compliance with Goal 2. Changes in land ownership affecting BLM lands or interests in lands will be posted to the DFO's official land ownership coverage in a timely manner.

The number of acres acquired and/or disposed of through land exchanges, acquisitions, sales, and Recreation and Public Purpose Act patents will be reported in the Annual Program Summary and Planning Update.

**Access**

**Goal 3**

Acquire and maintain access to public lands where needed to improve management efficiency and facilitate multiple use and the public's enjoyment of these lands in coordination with other federal agencies, state and local governments, and private landowners.

**Actions**

- 1 Obtain legal public or administrative access on a case-by-case basis as the need or opportunity arises.

- 2 Use all available methods to obtain legal public or administrative access from willing landowners over non-Federal lands to reach public lands lacking adequate access (e.g., easements acquired through purchase, exchange, or donation; land exchanges; fee title purchases or donations; or long-term land use agreements). Easement acquisition is anticipated to be the predominant method of obtaining legal access.
  - 3 Focus acquisition efforts on those routes designated as "open" under travel management that lack legal public access. Place higher priority on acquiring access to BLM lands identified for permanent retention in Category 1 than on acquiring access to BLM lands in Category 2.
  - 4 Maintain existing access in conveyance documents associated with land ownership adjustments using appropriate covenant language.
  - 5 Consider the exercise of the right of eminent domain for securing access to public lands as an option of last resort in instances where a landowner is unwilling to allow the acquisition of lands or interests in lands necessary to secure access to public lands.
- 2 Consider other agency requests for withdrawal relinquishments, extensions or modifications on a case-by-case basis.
  - 3 Consider new withdrawal proposals on a case-by-case basis where the public land would transfer from one federal agency to another or where resource values or agency investments are best protected by withdrawal. Lands proposed to be withdrawn should be the minimum area required for the intended use and where applicable alternative prescriptions such as the use of rights-of-way, leases, permits, or cooperative agreements are inadequate to protect the resource values.
  - 4 Terminate the C&MU classification in the planning area involving a five-acre site at Road Agent's Rock in Section 29, T7S, R11W, PMM.
  - 5 Review any additional existing land classifications on a case-by-case basis to determine if they should be continued or terminated.
  - 6 Assist in processing proposed withdrawals from operation of the mining law (see Map 16, oversized) to support other program goals and objectives in the following areas (all acreages are approximate):
    - a. Beaverhead Rock (120 acres)
    - b. Christnot Mill (20 acres)
    - c. Developed Recreation Sites (797 acres)
    - d. Everson Creek (2,160 acres)
    - e. Lewis's Lookout (160 acres)
    - f. Land along the Madison River between Warm Springs and the planning area boundary to the north (1,609 acres)
    - g. Road Agent Rock (10 acres)
    - h. Squirrel Rock (10 acres)
    - i. Virginia City Historic District (513 acres)
    - j. Wedding Ring Rock (10 acres)

### ***Monitoring***

Access acquisition will be monitored through the BLM accomplishment tracking process. Management, realty personnel, and other key staff members in the Dillon Field Office will meet periodically to review program status and compliance with Goal 3. Existing easements and other acquisition documents will be reviewed periodically to ensure that both the landowner and the BLM are complying with the terms of the documents.

The number of easements acquired or renewed will be reported in the Annual Program Summary and Planning Update.

## **Withdrawals**

### ***Goal 4***

Utilize withdrawal actions with the least restrictive measures and minimum size necessary to accomplish the required purposes.

### ***Actions***

- 1 Review existing withdrawals on a case-by-case basis prior to the end of the withdrawal period or as otherwise required by law to determine whether the withdrawals should be extended, revoked, or modified. Withdrawals no longer needed, in whole or in part, for the purpose for which they were withdrawn will be revoked or modified. Appendix J describes the existing withdrawals in the planning area as shown on Map 16 (oversized).

### ***Monitoring***

Withdrawal actions will be monitored through the BLM accomplishment tracking process. Management, realty personnel, and other key staff members in the Dillon Field Office will meet periodically to review program status and compliance with Goal 4.

Any new withdrawals from operation of the public land laws and/or mineral laws will be reported in the Annual Program Summary and Planning Update, as will any withdrawal revocations.

## **LIVESTOCK GRAZING**

### ***Goal***

Manage the public rangelands to provide for a sustainable level of livestock grazing consistent with multiple use and sustained yield.

### ***Allocations***

Manage approximately 852,778 acres of public land as available for livestock grazing (see Map 19, oversized).

Manage approximately 47,837 acres of public land as unavailable for livestock grazing (see Map 19, oversized). No term grazing permits or leases would be issued for these areas. These areas could be grazed with livestock on a temporary nonrenewable basis to meet resource objectives of the area. Lands that are not available include:

- Unallotted areas
- Blue Lake
- Eli Springs area

Maintain the Cross and Exchange Allotments as Resource Reserve Allotments. (A Resource Reserve Allotment is a unit of public land that will not have term grazing permits issued. Such an allotment will only be grazed on a temporary nonrenewable basis. The use of these allotments will be to provide temporary grazing to rest other areas following wildfire, habitat treatments, or to allow for more rapid attainment of rangeland health. The allotment must be of sufficient size to be managed as a discrete unit. Resource Reserve Allotments should be distributed throughout the planning area).

Designate Resource Reserve Allotments on a case-by-case basis following watershed evaluations as described in *Livestock Grazing Actions* 20, 21, and 22.

Maintain all current riparian exclosures as unleased for livestock grazing.

### ***Actions***

- 1 Authorize an average of between 101,183 and 113,219 Animal Unit Months (AUMs) on about 425 allotments, subject to lands meeting the *Western Montana Standards for Rangeland Health* and make adjustments to allotments for management efficiency.
- 2 Use watershed evaluations (see Map 20 for watershed areas) when authorizing livestock grazing to assess whether the *Western Montana Standards for Rangeland Health* (Appendix A) are being met or if changes in livestock grazing are necessary.
- 3 Incorporate the *Guidelines for Livestock Grazing* as described in Appendix A into livestock grazing permits, as well as strategies outlined in *Best Management Practices for Grazing* (MT DNRC 1999), when applicable.
- 4 Follow the procedures outlined in the *Rangeland Health Standards Handbook* (H-4180) for areas that do not meet the *Western Montana Standards for Rangeland Health* due to livestock grazing.



- 5 Continue to implement existing Allotment Management Plans (AMPs), including the associated range improvement projects.
- 6 Develop and implement new Allotment Management Plans to direct site-specific management of livestock grazing after completion of rangeland health assessments conducted on a watershed basis.
- 7 Modify grazing schedules and livestock management practices as necessary during drought conditions.
- 8 Establish allowable use levels for grazing allotments during the watershed evaluation process. Make any adjustments to livestock numbers, including increases or decreases, following watershed evaluations, standards for rangeland health assessments, and interdisciplinary review. Use monitoring data to adjust livestock grazing by allotment in order to meet the *Western Montana Standards for Rangeland Health*. Impose any reductions in graduated steps. Allocate increases, if appropriate, after interdisciplinary review.
- 9 Set livestock utilization levels on key forage species on a case-by-case basis during the watershed assessment process and in the development of individual allotment management plans. The most common key forage species for southwest Montana are: bluebunch wheatgrass, Idaho fescue, basin wildrye, needle-and-thread, and western wheatgrass.
- 10 Conduct use supervision of authorized grazing within staffing capabilities.
- 11 Jointly manage FS-BLM allotments as agreed to under the Beaverhead-Deerlodge NF and Butte District BLM MOU for cooperative management.
- 12 Implement the "Revised Guidelines for Management of Domestic Sheep and Goats in Native Wild Sheep Habitats" when allowing grazing in bighorn sheep habitat.

- 13 Manage grazing to protect concentrated westslope cutthroat trout spawning areas in streams containing 99 to 100 percent genetically pure populations.
- 14 Adjust management on a case-by-case basis to protect BLM special status plant species when the *Western Montana Standards for Rangeland Health* are not being met, or when monitoring of special status plants indicates unacceptable impacts from livestock grazing.
- 15 Manage the density and height of emergent wetland vegetation (cattails, rushes, etc.) to provide residual nesting cover and concealment of trumpeter swans and other waterfowl within the wetland and waterfowl production areas in the Centennial Valley (see Map 36).
- 16 Rest vegetation treatment areas (e.g., prescribed burns) from livestock grazing up to one year prior to treatment (if necessary) to maintain fine fuels for burning, and for a minimum of two growing seasons following treatment to promote recovery of vegetation. Livestock rest for less than two growing seasons could be justified on a case-by-case basis.
- 17 Incorporate design features into small and isolated aspen restoration treatments to reduce or eliminate browsing impacts until the aspen regeneration has reached a minimum of five feet tall on average.
- 18 Maintain cattle as the primary class of livestock on mountain mahogany habitat. Sheep grazing on mountain mahogany habitat will be mitigated through site specific management treatments, changed to cattle use, or eliminated where monitoring data indicates it is necessary.
- 19 Authorize no new domestic sheep permits or conversion of cattle permits to sheep within areas depicted on Map 33 that contain suitable grizzly bear and wolf habitat (also known as the wildlife dispersal/migration corridors in the Centennial Mountains, Snowcrest Mountains, Gravelly Range, Greenhorn Mountains, Axolotl Lakes area, and along the Continental Divide from Monida to Lemhi Pass).
- 20 Evaluate currently unleased/unpermitted lands during the watershed assessment process to determine if they should remain unavailable for grazing, be reallocated, or be designated as Resource Reserve allotments. Priority will be given to designating Resource Reserve Allotments where the need exists. Designate allotments that are meeting the *Western Montana Standards for Rangeland Health*, are manageable as distinct grazing units, and are in a location where a resource reserve allotment is needed, as Resource Reserve allotments. If the allotment meets the *Western Montana Standards for Rangeland Health* but is not manageable as a distinct grazing unit or is not in a location where a resource reserve allotment is needed, the allotment will either be reallocated in accordance with the grazing regulations (43 CFR Part 4130.1-2) or classified as unavailable for livestock grazing.
- 21 Evaluate allotments that are relinquished or cancelled to determine if they should be designated as Resource Reserve allotments, reallocated, or designated as unavailable for livestock grazing. Designate allotments that are meeting the *Western Montana Standards for Rangeland Health*, are manageable as distinct grazing units, and are in a location where a resource reserve allotment is needed, as Resource Reserve allotments. If the allotment meets the *Western Montana Standards for Rangeland Health* but is not manageable as a distinct grazing unit or is not in a location where a resource reserve allotment is needed, the allotment will either be reallocated in accordance with the grazing regulations (43 CFR Part 4130.1-2) or classified as unavailable for livestock grazing.
- 22 Evaluate acquired lands to determine if they should be designated as Resource Reserve allotments, allocated for grazing, or designated as unavailable for livestock grazing. Designate allotments that are meeting the standards for rangeland health, are manageable as distinct grazing units, and are in a location where a resource reserve allotment is needed, as Resource Reserve allotments IF the anticipated grazing use is compatible with the values for which the lands were acquired. If the lands/allotment meet the *Western Montana Standards for Rangeland Health* but are not manageable as a distinct grazing unit or is not in a location where a resource reserve allotment is needed, the lands/allotment will either be reallocated in accordance with the grazing regulations (43 CFR Part 4130.1-2) or classified as unavailable for livestock grazing, again in consideration as to whether grazing use is compatible with the values for which the lands were acquired.

### **Monitoring**

The number of allotments/acres that meet the *Western Montana Standards for Rangeland Health* and the total number of allotments/acres assessed will be reported in the Annual Program Summary and Planning Update.

## **MINERALS**

### **Leasables, including Oil and Gas, Coal, Oil Shale, and Phosphate**

#### **Goal 1**

Advance dependable, affordable, and environmentally responsible production and distribution of leasable minerals

by identifying lands appropriate for lease and development.

**Allocations**

Make approximately 145,554 acres unavailable for oil and gas leasing (see Map 21, oversized) in the following areas:

- Bear Trap Wilderness Area
- All nine Wilderness Study Areas
- Federal minerals under lands administered by the Agricultural Research Service
- Lands within the boundaries of National Historic Landmarks

Make the remainder of federal mineral estate in the planning area (approximately 1,209,278 acres) available for leasing, subject to the stipulations specified in Table 5 or under Standard Lease Terms.

- Approximately 433,797 acres are available for oil and gas leasing, subject to No Surface Occupancy stipulations.
- Approximately 632,061 acres are available for oil and gas leasing, subject to Timing Limitations and/or Controlled Surface Use stipulations.
- Approximately 143,420 acres are available and subject to standard lease terms (and to the CSUs listed on Table 5 that apply to the entire planning area)

Map 21 (oversized) depicts lands subject to No Lease, No Surface Occupancy, Timing Limitations, and/or Controlled Surface Use stipulations, subject to change based on new and updated inventory information over time. Table 5 summarizes the stipulation requirements by resource. Appendix K provides the stipulation language and identified waivers, exceptions, and modifications.

Make all lands in the planning area available for exploration and development of leasable solid minerals (phosphate, etc.) except for approximately 124,235 acres in the Bear Trap Wilderness area and the nine Wilderness Study Areas which are unavailable for new leases. (The one existing phosphate lease in the Centennial Mountains WSA issued prior to October 21, 1976 will be managed in accordance with the *Interim Management Policy for Lands Under Wilderness Review*).

Make lands in the planning area available for geothermal leasing, unless located within wilderness or WSAs, or in instances where it is determined that issuing the lease would cause unnecessary or undue degradation to public lands or resources.

**Table 5  
Oil and Gas Lease Terms and Stipulations**

Key	
CSU	Controlled Surface Use Stipulation
LN	Lease Notice
NL	No Lease
NSO	No Surface Occupancy Stipulation
SLT	Standard Lease Term
TL	Timing Limitation Stipulation
Distances are enumerated and those equal or greater than 300 are feet and those 3 or less are miles.	
Time periods are month/day.	
<i>Resource</i>	<i>Alt B</i>
<b>Wildlife</b>	
Sage Grouse Winter/Spring Range	TL 12/1-5/15
Sage Grouse Strutting Grounds (leks)	NSO 1/4
Sage Grouse Breeding Habitat	TL 3/1-6/30
State Game Ranges (4)	NSO
Big Game Winter Range	TL 12/1-5/15
Elk Calving/Big Game Birthing Areas	TL 4/1-6/30
Bighorn sheep yearlong habitat	TL 11/1-6/30
Bighorn sheep core areas	NSO
Bald Eagle Nesting/Breeding	NSO 1/2 + 1 TL 2/1-8/31
Raptor Breeding Areas	1/2 TL 3/1-7/31
Waterfowl Production Molting Areas	1/2 TL 4/1-8/31
NAWCA/IMWJV wetland projects	NSO 1/2
Peregrine Falcon Breeding Territories	NSO 1
Ferruginous hawk nesting areas	NSO 1/2 + 1 TL 3/1-8/31
Threatened, Endangered, and Special Status Species	CSU
<b>Fisheries</b>	
Westslope Cutthroat Trout Habitat 99-100% pure	NSO 1/2
Westslope Cutthroat Trout Habitat 90 up to 99% pure	CSU 1/2
Fluvial and adfluvial arctic grayling	NSO 1/2
Class 1 Fisheries (Blue Ribbon)	NSO 1/2
<b>Recreation</b>	
Developed Sites	NSO
Undeveloped Recreation Sites	—
Special Recreation Management Areas	CSU
Vehicle Use Restrictions	CSU
<b>Cultural Resources</b>	
Cultural Res. Inventory Requirement	CSU
NRHP Eligible Properties/Districts	NSO 300
Traditional Cultural Properties	NSO 1/2
<b>Paleontological Resources</b>	
Paleo. Inventory Requirement	CSU
Known Paleo. Sites/Locales	NSO
<b>Visual Resources</b>	
VRM Class II, III & IV Areas	CSU

<b>Vegetation, Wetlands and Riparian</b>	
Special Status Plant Inventory Requirement	CSU
Known or Discovered Populations	NSO 1/4
Wetlands, Floodplains & Riparian Areas	NSO
<b>Landforms, Soils, and Water Quality</b>	
Active Mass Movement Areas	NSO
Slopes $\geq 30\%$	CSU
<b>Trails, Rivers and Special Designations</b>	
National Historic Trails	NSO 1/2
National Historic Landmarks	NL
Continental Divide Natl. Scenic Trail	NSO 1/2
Rivers Suitable for WSR Designation	N/A
Beaverhead Rock ACEC	NSO
Block Mountain ACEC	NSO/TL/CSU
Blue Lake ACEC*	NL
Centennial Mountains ACEC*	NL/NSO/CSU/TL
Centennial Sandhills ACES	NSO 1/4/CSU
Everson Creek ACEC*	NSO 1/2/TL
Muddy/Big Sheep Creek ACEC	NL/NSO 300
Virginia City ACEC	NL
<b>Other Resources</b>	
Major Road ROWs	NSO
R&PPs and 2920 Authorizations	SLT
*Lands in the Centennial Mountains ACEC that also lie within the Centennial Mountains WSA boundary, lands in the Blue Lake ACEC that lie within the Axolotl Lakes WSA, and lands in the Muddy/Big Sheep Creek ACEC that also lie within the Hidden Pasture WSA are not available for oil and gas leasing.	

### Actions

- 1 Offer public lands available for oil and gas leasing first by competitive bid at an oral auction. Apply lease notices and stipulations at the time of leasing as summarized in Table 5 and as written in Appendix K. Consider waivers, exceptions, and modifications in accordance with the provisions in Appendix K and provide for a 30-day public review if the grant of a waiver, exception, or modification is determined to be a substantial change.
- 2 Apply oil and gas lease stipulations recommended by the Bureau of Reclamation (BOR) on federal minerals underlying lands administered by BOR (see Appendix L).
- 3 Manage oil and gas leases existing prior to the Record of Decision for the Dillon RMP according to the existing lease stipulations. When the lease expires, manage those lands according to the oil and gas decisions and required stipulations outlined in the ROD/Approved Plan.
- 4 In cases where management of the surface over federal minerals is the responsibility of an agency other than BLM, BLM will consult with and obtain consent, if necessary, from the surface managing agency before issuing oil and gas leases or when approving Applications for Permit to Drill.
- 5 Allow for the lease of lands under the jurisdiction of another agency that are otherwise unavailable for leasing only if oil and gas is being drained from such lands. If the unavailable lands are under the jurisdiction of another agency, leasing of such lands will only occur following consultation, and consent, if necessary, from the surface managing agency.
- 6 Allow for the lease of lands under the administration of the BLM that are otherwise unavailable for leasing if a state or fee well is completed within the same spacing unit, or if the lands are within a producing unit. These lands will be leased with a no surface occupancy and no subsurface occupancy stipulation without waiver, modification or exception provisions. There will only be a paper transaction with no physical impacts on the unavailable lands. There will be no exploration or development (drilling or production) within the unavailable lands. After issuance of a lease, the lease will be committed to a communitization agreement and the United States will then receive revenue in proportion to its acreage interest as it bears to the entire acreage interest committed to the agreements.
- 7 Use lease notices to provide additional information to the lessee. These notices do not place restrictions on lease operation, but do provide information about applicable laws and regulations, and the requirements for additional information to be supplied by the lessee.
- 8 Require approval of proposed drilling and associated activities before operations begin. The operator must file an Application for Permit to Drill or Sundry Notice that must be approved according to (1) lease stipulations, (2) Onshore Oil and Gas Orders, and (3) regulations and laws (see the "Permitting" section in Appendix M, *Procedures in Oil and Gas Recovery*). Apply Conditions of Approval as appropriate (see the *Conditions of Approval* in the "Application for Permit to Drill" section in Appendix M).
- 9 Consider proposals for coal and oil shale leasing on a case-by-case basis. A plan amendment would be necessary to lease, along with the appropriate level of environmental analysis.
  - Issue any oil shale leases under the authority of 30 U.S.C. Chapter 3A, Subchapter V, Sec. 241 which authorizes the Secretary of the Interior to lease deposits of oil shale
  - Apply unsuitability criteria described in 43 CFR Part 3461 to coal lands determined to have development potential on a case-by-case basis.

- 10 Prepare a site-specific environmental analysis if interest is expressed in exploring for or developing geothermal resources in the planning area. Apply oil and gas stipulations to any geothermal lease if appropriate. Geothermal exploration and production activity is sufficiently different from oil and gas that the stipulations developed for oil and gas may not be appropriate and can be modified, and additional mitigating measures over and above the oil and gas lease stipulations can be required.
- 11 Monitor reclamation occurring at the phosphate mine in the Centennial Mountains.

## **Goal 2**

Allow environmentally responsible geophysical exploration for energy resources in the Dillon Field Office on lands administered by the BLM.

### **Actions**

- 1 Review Notices of Intent to Conduct Geophysical Exploration (NOI) in the planning area and develop appropriate mitigation measures so as not to create undue and unnecessary degradation.
- 2 Prepare a site-specific environmental analysis for each NOI filed. Develop mitigation measures using the oil and gas lease stipulations approved in this plan as the starting point.
  - The transient nature of geophysical exploration and the short-term impacts of the exploration may provide an opportunity for operations to occur in seasonal wildlife areas during the time of closure under lease stipulations without creating detrimental effects on wildlife. As such the proposed exploration will be analyzed for the length and nature of its impact to determine if operations can be allowed during the period of closure found in lease stipulation(s).
  - Allow geophysical exploration on a case-by-case basis in areas closed to oil and gas leasing based on the nature and level of impacts from the exploration, and consistency with other applicable policy.
  - Geophysical operations may also be allowed in areas of No Surface Occupancy (NSO) stipulations for oil and gas leasing. A determination will be made considering the nature and impacts of the proposed exploration and the reason behind the NSO restriction. This will be documented and be the basis for allowing or not allowing geophysical exploration in NSO areas.
- 3 Apply travel restrictions based on route designations made through travel management decision to geophysical

cal exploration, with consideration given to exceptions as appropriate and granted on a case-by-case basis.

### **Monitoring**

Monitoring for leasable minerals will be done to ensure compliance with applicable laws, regulations, conditions of leases, and the requirements of approved exploration/development plans/applications for permit to drill. Monitoring activities will include:

1. Periodic field inspections of leasable mineral activities. Inspections will be conducted to determine compliance with applicable laws, regulations, lease stipulations, and the requirements of approved exploration and development plans, applications for permit to drill, and sundry notices.
2. Monitoring of oil and gas drilling/production activities in the planning area. Total gross surface disturbance and net surface disturbance from all drilling will be tracked, based on the following formulas:
  - Gross surface disturbance = current (existing) disturbance + new disturbance
  - Net surface disturbance = current (existing) disturbance + new disturbance – reclaimed acreage

These acreage figures will be compared to the total of 523 acres of disturbance anticipated as a result of projected well drilling and field development. Additional analysis and/or amendment of the plan will be considered if the net surface disturbance acreage exceeds 523 acres.

An accurate accounting of production will also be tracked on producing leases. Acres of new disturbance, acres reclaimed, and production numbers from producing leases will be reported in the Annual Program Summary and Planning Update.

## **Locatable Minerals**

### **Goal**

Encourage and facilitate development of locatable minerals in a manner to prevent unnecessary or undue degradation.

### **Allocations**

Manage approximately 30,000 acres of federal mineral estate currently withdrawn from operation of the mining law as closed to locatable mineral entry (see Map 16, oversized), but review as necessary prior to expiration (if applicable) to determine whether the withdrawals should be extended, revoked, or modified. This includes the Bear Trap Unit of the Lee Metcalf Wilderness, the Beaverhead River acquisition, FERC Power Projects on the Madison River and Wisconsin Creek, the reservoir site reserve for Lima Reservoir, areas withdrawn for several BLM recreation sites, public

water reserves, an air navigation site, the Clark Canyon Reservoir Reclamation Project, and several Forest Service administrative sites located outside National Forest Boundaries.

Make an additional 5,098 acres unavailable to mineral entry (see Map 16, oversized) upon completion of withdrawal actions (Note: there is some overlap of lands in the areas listed below, therefore the total of acres of items a-j does not correspond with the total acres proposed for withdrawal).

- a. Beaverhead Rock (120 acres)
- b. Christnot Mill (20 acres)
- c. Developed Recreation Sites (797 acres)
- d. Everson Creek (2,160 acres)
- e. Lewis's Lookout (160 acres)
- f. Land along the Madison River between Warm Springs and the planning area boundary to the north (1,609 acres)
- g. Road Agent Rock (10 acres)
- h. Squirrel Rock (10 acres)
- i. Virginia City Historic District (513 acres)
- j. Wedding Ring Rock (10 acres)

Manage federal mineral estate underlying R&PP conveyances as closed to mineral entry. Manage the remainder of split federal mineral estate as open to locatable mineral entry, subject to the provisions of 43 CFR Part 3814.

### **Actions**

1. Ensure all requirements of appropriate state and federal laws are met in the management of mining operations. Refer inquiries to appropriate agencies for further guidance on other permit requirements.
2. Work done by hand without use of explosives will be considered "casual use".
3. Review and process notices and plans of operations submitted under 43 CFR Parts 3802 and 3809 to ensure the proposed action does not create unnecessary or undue degradation of the environment.
4. Coordinate with Montana DEQ during the review, approval, inspection and reclamation of mining operations.
5. Conduct at a minimum annual compliance inspections on each active notice and plan of operation.
6. Apply terms and conditions to mining activities (within the constraints of the mining law) to meet the *Western Montana Standards for Rangeland Health* for uplands, riparian and wetlands, water quality, air quality, and native plant and animal species.
7. Require bonding equal to 100 percent of the amount needed for full restoration of disturbed habitat to proper

functioning condition where surface disturbing mineral exploration or development takes place within 100 feet of the centerline of any stream containing westslope cutthroat trout with a genetic purity of 90 percent or greater. Require a Plan of Operation before mineral production activities are initiated in these same areas.

8. Analyze all recommendations to dispose of or withdraw additional lands to determine the mineral potential (e.g., mineral character) of each tract before any decision is finalized.
9. Withdraw approximately 2,305\* additional acres in the following areas from locatable mineral entry as part of standard management (see Map 16, oversized):
  - a. Christnot Mill (20 acres)
  - b. Developed Recreation Sites not already withdrawn (797 acres)
  - c. Lewis's Lookout (160 acres)
  - d. BLM lands that are not already withdrawn located along the Madison River from the north Bear Trap Wilderness boundary north to the DFO boundary (1609 acres)
  - e. Road Agent Rock (10 acres)
  - f. Squirrel Rock (10 acres)
  - g. Wedding Ring Rock (10 acres)

\*The sum of acres does not match the total due to the overlap of some of the proposed areas.
10. Withdraw approximately 2,793 additional acres in the following areas from locatable mineral entry as part of special management to protect relevant and important values within designated ACECs (see Map 16, oversized):
  - a. Beaverhead Rock (120 acres)
  - b. Everson Creek (2,160 acres)
  - c. Virginia City Historic District (513 acres)

### **Monitoring**

Monitoring of mining operations will be done to ensure compliance with 43 CFR 3809, 3802 and 3715 and other regulations and conditions of approval, specifically preventing "unnecessary or undue degradation". When applicable and practical, Plan and Notice review, inspections and associated compliance work will be coordinated with the Montana Department of Environmental Quality. Coordination with Montana DEQ will help ensure adequate monitoring.

Each Plan of Operation and Notice has or will have mitigation measures that cover the life of the operation. Field inspections will look for compliance with these measures and include monitoring weed control, reclamation of disturbed areas, revegetation and protection of the environment and public health and safety. Findings for each inspection will be documented and placed in the case file. Any non-

compliance items will be noted and appropriate regulatory procedures followed.

43 CFR 3809 regulations require inspections at least four times a year for operations that use cyanide or other leachate or where there is significant potential for acid drainage. Inspections for active operations will occur twice a year and all others will be inspected once per year. Operations in sensitive areas or operations with a high potential for greater than usual impacts will require inspections more often.

The number of explorations/operations monitored and the number in compliance will be reported in the Annual Program Summary and Planning Update.

## Salable Minerals (Mineral Materials)

### *Goal*

Provide for the extraction of mineral materials to meet public demand, while minimizing adverse impacts to other resource values.

### *Allocations*

Manage 136,226 acres as closed to mineral material disposal in the following areas (see Map 22):

- Bear Trap Wilderness
- All nine Wilderness Study Areas
- Centennial Sandhills
- Christnot Mill
- Developed recreation sites
- Lewis's Lookout
- Sheep Creek Common Use Area
- Lands within one-quarter mile either side of the Big Sheep Creek Road, except in sections 26 and 35 in T14S, R10W and section 2 in T15S, R10W

Manage the remainder of the planning area as open to mineral material disposal, subject to the provisions described in the *Action* section below.

### *Actions*

- 1 Maintain current mineral material sites (see Map 22) until material is exhausted or other circumstances warrant closure.
- 2 Encourage extraction of mineral materials from previously disturbed sites rather than opening new sites.
- 3 Analyze proposals for new mineral materials sites outside of closed areas on a case-by-case basis and only establish new community pits/common use areas when a significant need for material is demonstrated and a significant amount of material will be removed. Exclusive sales outside of closed areas will be analyzed on a case-by-case basis. Follow the Standard Operating Pro-

cedures detailed in Appendix N when establishing new mineral materials sites.

- 4 Do not authorize mineral material disposal from any valid existing mining claim without the consent of the claimant.

### *Monitoring*

Monitoring of salable minerals will be done to ensure compliance with applicable laws, regulations, BLM policy contained in BLM Manual Section 3600 and Handbook H-3600-1.

Field inspections of common use areas, exclusive sale sites and other operations will be done on a periodic basis and will determine compliance with applicable laws, regulations, and the requirements of the approved mining plan. Inspections will specifically note compliance with reclamation, weed control and the protection of the environment and public health and safety. Operations in sensitive environmental areas or operations with a high potential for greater than usual impacts will be inspected more often. Identification and resolution of salable mineral trespasses will also be performed.

The number of mineral material sites monitored and the number of these sites in compliance will be reported in the Annual Program Summary and Planning Update.

## NATIONAL TRAILS

### *Goal 1*

Assist in cooperative efforts to manage current and future national trails to protect the values for which they were designated. See Map 12 for trail locations in the planning area.

### *Actions*

- 1 Manage both the Continental Divide National Scenic Trail (CDT) and the Bear Trap Canyon National Recreation Trail to preserve the surrounding scenic values and to provide for primitive recreation opportunities.
- 2 Place the highest priority for trail work (maintenance and/or reconstruction) on the CDT, along with the Bear Trap Canyon National Recreation Trail.
- 3 Formalize an agreement between the BLM, ARS, and USFS regarding specific areas of responsibility for trail segments along the CDT.
- 4 Complete, sign and maintain the BLM-managed portions of the CDT to allow the public to enjoy the trail while maintaining the surrounding natural beauty of the corridor and the opportunity for a relatively primitive recreation opportunity.

- 5 Manage the portions of the Lewis and Clark and Nez Perce (Nee-Me-Poo) National Historic Trails crossing lands administered by the DFO to protect and enhance their respective historic values. Consider interpretative opportunities on a case-by-case basis.
- 6 Follow BLM manual guidance, the National BLM Programmatic Agreement and Implementing Protocol for Montana, and the Comprehensive Plan for the Nez Perce (Nee-Me-Poo) National Historic Trail (USDA-FS 1990) in the management of National Historic Trails.
- 7 Manage 4.4 miles of the 16 miles of the Lewis and Clark National Historic Trail and associated viewshed in the Horse Prairie area under VRM Class III.

### ***Monitoring***

The Continental Divide National Scenic Trail (CDT) will be monitored annually to ensure that the trail presents no unreasonable public safety hazards, is not contributing to unacceptable levels of resource damage, and is suitable for use as a recreational hiking/equestrian travel route through the Centennial Mountains. The BLM will continue to work with various volunteer organizations and cooperate with the other affected agencies (USFS, USFWS, and ARS) to ensure public needs are being addressed along this route.

Periodic monitoring will be conducted along those segments of the Lewis and Clark National Historic Trail and the Nez Perce (Nee-Me-Poo) National Historic Trail managed by the Dillon Field Office to ensure that management actions are not adversely impacting the historical values for which the trails were designated. In addition, annual monitoring will be conducted to ensure that management activities are consistent with BLM Manual Guidance for the management of National Historic Trails, and developed and comprehensive plans prepared for specific trails (e.g. the Nez Perce (NEE-ME-POO) National Historic Trail Comprehensive Plan).

## **NOXIOUS WEEDS, INVASIVE AND NON-NATIVE SPECIES**

### ***Goal***

Prevent the introduction and spread of invasive and noxious plants.

### ***Objective (Desired Future Condition)***

New infestations of noxious weeds are not common across the landscape, and existing large infestations are declining.

### ***Actions***

- 1 Manage Montana State designated noxious weeds according to the principles of integrated pest management found in *Partners Against Weeds: An Action Plan for*

*the Bureau of Land Management* (USDI-BLM 1996b), the Montana Weed Management Plan (Duncan 2001), and the Montana Noxious Weed Act.

- 2 Participate in education and awareness programs for staff, cooperators, and the public.
- 3 Continue inventory of public lands for noxious weeds.
- 4 Monitor treatment areas
- 5 Continue cooperative agreements with Beaverhead and Madison counties for Integrated Weed Management.
- 6 Encourage development of Cooperative Weed Management Areas where all the landowners are cooperatively working to contain or eradicate noxious weeds within designated areas.
- 7 Control noxious weeds by various methods that include chemical, cultural, physical, mechanical, and biological treatments or other land practices.
- 8 Evaluate treatment and control of invasive species such as cheatgrass in site-specific projects associated with the watershed analysis.
- 9 Reestablish perennial vegetation in a timely manner to rehabilitate disturbance areas.
- 10 Use native species for rehabilitation and reclamation unless site specific evaluations indicate that nonnative species are needed to ensure success or rapid vegetative reestablishment.
- 11 When analyzing proposals to conduct aerial application of herbicides for weed control, emphasize protection of special status plants and associated plant communities in the Big Sheep Creek Basin area, occupied pygmy rabbit habitat, sage grouse breeding habitat, and mountain mahogany habitats.
- 12 Prohibit aerial application of herbicides and pesticides within the Centennial Sandhills ACEC boundary, but allow for other weed control methods, taking into consideration the special status plants in the area.

### ***Monitoring***

A sample of known noxious weed sites identified for treatment will be visited each year and evaluated for effectiveness of control. The following acreages will be reported in the Annual Program Summary and Planning Update to track plan implementation:

- Number of acres inventoried
- Number of acres evaluated to determine treatment effectiveness
- Number of acres treated

The number of allotments/acres that meet the Biodiversity standard in the *Western Montana Standards for Rangeland Health* relative to noxious weeds, invasive, and non-native species and the total number of allotments/acres assessed will also be reported in the Annual Program Summary and Planning Update.

## PALEONTOLOGICAL RESOURCES

### **Goal 1**

Preserve and protect significant paleontological resources and ensure that they are available for appropriate scientific, educational, and where appropriate recreational, uses by present and future generations.

### **Actions**

- 1 Maintain an inventory of paleontological sites and localities.
- 2 Require permits for individuals or institutions conducting paleontological investigations for vertebrate fossils on public lands and insure that fossils remain in federal ownership in perpetuity.
- 3 Establish a long term monitoring program at known paleontological locales to assess potential adverse impacts and propose actions to mitigate adverse impacts as appropriate. Monitor a minimum of one locality per year.

### **Goal 2**

Ensure that proposed land uses initiated or authorized by BLM avoid inadvertent damage to federal and non-federal paleontological resources

### **Actions**

- 1 Conduct an inventory for vertebrate paleontological resources in conjunction with the inventory for cultural resources prior to projects that may result in surface or sub-surface disturbance.
- 2 Avoid impacts to paleontological remains through project redesign, project abandonment, and/or mitigation of adverse impacts through scientific recovery and analysis.

### **Goal 3**

Promote the stewardship, conservation, and appreciation of paleontological resources through appropriate educational and public outreach programs

### **Actions**

- 1 Design and prepare paleontological resource awareness programs to enhance the public appreciation of paleontological resource values.

- 2 Encourage scientific use of paleontological resources by university field schools.

### **Monitoring**

An overview of paleontological resources in the Dillon Field Office identified 110 localities occurring within five major geographic areas: 1) Horse Prairie/Grasshopper Valleys; 2) Melrose/Beaverhead/Jefferson Valleys; 3) Muddy Creek Valley; 4) Sage Creek/Blacktail Valleys; and 5) Upper Ruby Valley. A long term monitoring program will consist of the visitation of a representative sample of paleontological localities in each of the five major geographical areas to establish a baseline condition assessment for major geologic formations containing paleontological materials within each of the five geographic areas. Once the baseline condition assessment information has been compiled, a minimum of one of each of the five geographic areas will be monitored on an annual basis to identify if any adverse impacts are occurring.

The number of localities visited on an annual basis and their condition will be reported in the Annual Program Summary and Planning Update.

## RANGELAND VEGETATION

### **Goal**

Manage the vegetative resource to maintain a diversity of ecological conditions on upland vegetation.

### **Objectives (Desired Future Condition)**

Sagebrush steppe includes a mosaic of multiple-aged shrubs, forbs, and native perennial grasses. Shrub overstories are present in a variety of spatial arrangements and scales across the landscape, including disjunct islands and corridors.

A full range of sagebrush communities with diverse species and sub-species, canopy, density, and age classes are present across the landscape.

Grass and forb plant communities occur within site potential and are stable or improving in health and vigor.

Populations and habitats of rare plant species and their associated communities are stable or continue to improve in vigor and distribution.

Upland vegetation provides sufficient plant cover and litter accumulation to protect soils from wind and water erosion, and enhances nutrient cycling and productivity.

### **Actions**

- 1 Implement the *Western Montana Standards for Rangeland Health* on BLM lands in southwest Montana by completing assessments for land health standards on a watershed basis, pursuant to current BLM guidance

found in H-4180-1, Rangeland Health Standards. Complete the assessments for land health standards based on the watershed areas and evaluation schedule identified on Map 20, pending funding or other constraints, and then begin rotation again.

- 2 Implement strategies to protect rangeland resources during periods of drought with an emphasis on voluntary adjustments in livestock use to maintain or achieve long-term resource productivity.
- 3 Consider the following species priority upland plant species:
  - Aspen
  - Curl leaf mountain mahogany
  - Basin big sagebrush
  - Mountain big sage brush
  - Basin wild rye
  - Bluebunch wheatgrass
  - Idaho fescue

These species are widespread across the planning area but priority is placed on them when they are part of the vegetative component of priority habitats such as big game winter range and special status species habitats.
- 4 Allow treatment of conifer encroachment in all non-forested habitats to restore the appropriate upland habitat type. Encroachment may be treated or harvested with prescribed and natural fire, mechanical treatments, or other tools as appropriate.
- 5 Consistent with forest and woodland management, focus treatment of conifer encroachment in areas of urban interface and in the southern Ruby Mountains, the south Tobacco Roots, and in the Barton/Idaho Gulch areas. However, treatments can occur across the planning area as determined through watershed evaluations.
- 6 Identify units, develop site-specific prescriptions, and identify the tools to be used to achieve the desired resource conditions for each habitat type on a case-by-case basis during the watershed analysis.
- 7 Manage xeric shrub habitat types for a fire return interval of approximately 50 years, using all available tools.
- 8 Manage mountain shrub habitat types for a fire return interval of 20 to 40 years, using all available tools.
- 9 Manage fire-sprouted mountain shrub habitat types for a fire return interval of approximately 20 years, using all available tools.
- 10 Consider treatment of mesic shrub habitat types, which only occur in limited amounts in the planning area, on a case-by-case basis.

- 11 Consider treatment of mountain mahogany habitat types, which only occur in limited amounts in the planning area, on a case-by-case basis. Consider use of fire or mechanical methods to maintain and enhance the existing habitat.
- 12 Emphasize protection of dense sagebrush patches within occupied pygmy rabbit habitat. Do not treat the densest patches of sagebrush within sagebrush communities occupied by pygmy rabbits.
- 13 Do not authorize activities contributing to the loss of Basin big sagebrush and Wyoming big sagebrush "stringer" habitat through mechanical damage or other means.
- 14 Improve existing seedings that are not meeting rangeland health standards for plant vigor and density by implementing grazing management systems or re-seeding with appropriate species of natives or cultivars. Focus restoration of any existing seedings on areas containing high resource values and/or priority habitats and species. Allow the use of all available tools.

### **Monitoring**

Ecological trends due to changes in vegetation composition over time will be measured through periodic rangeland health assessments following procedures outlined in *Interpreting Indicators of Rangeland Health* (Pellant et al. 2005).

The number of allotments/acres that meet the Upland standard in the *Western Montana Standards for Rangeland Health* and the total number of allotments/acres assessed will be reported in the Annual Program Summary and Planning Update.

## **RECREATION**

Note: See the *Travel Management* section for discussion of motorized and non-motorized use for recreational and other purposes.

### **Goal 1**

Provide a diverse array of quality, resource based recreation opportunities while protecting and interpreting the resource values, providing educational opportunities, minimizing user conflicts, and promoting public safety.

### **Goal 2**

Develop and maintain appropriate recreation facilities, balancing public demand, protection of Public Land resources, and fiscal responsibility.

### **Allocations**

Manage the following nine areas as designated Special Recreation Management Areas (SRMA) (see Map 23) and man-

age them according to the specified recreational emphasis outlined in Table 6 in the *Actions* section:

- Axolotl Lakes
- Big Sheep Creek
- Centennial Mountains
- East Fork Blacktail Deer Creek
- Lower Big Hole
- Lower Madison
- Ruby Mountains
- South Pioneers
- Upper Madison

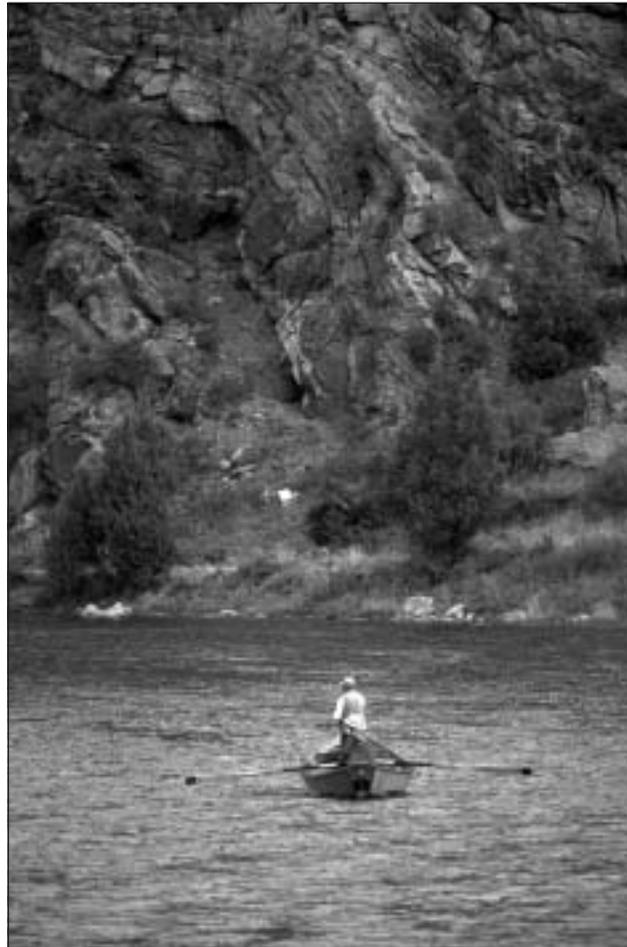
Manage the remaining lands in the planning area as the Extensive Recreation Management Area.

Designate the Rocky Hills area as a SRMA, including lands within the Henneberry Ridge WSA if the WSA is released from further consideration as wilderness (see Map 23).

### ***Actions***

- 1 Manage land in the planning area for a variety of recreation opportunities (e.g., hunting, fishing, sightseeing, off-highway vehicle use, horseback riding, mountain biking, hiking, rafting, rockhounding, etc.) consistent with other resource management objectives.
- 2 Implement the Lower Madison River Recreation Area Management Plan (USDI-BLM 2003a) and the Missouri-Madison Comprehensive Recreation Plan (Dames & Moore 1996, revised PPL Montana, LLC 2001).
- 3 Complete the evaluation and update of the Bear Trap Canyon Wilderness Management Plan (USDI-BLM 1984a) and implement.
- 4 Continue to implement the Lower Big Hole River Recreation Area Management Plan (USDI-BLM 1987a).
- 5 Consider development of additional recreational support facilities at the Maiden Rock Boat Launch site on the Lower Big Hole River.
- 6 Place emphasis on providing interpretive and informational signs and materials for public lands visitors.
- 7 Limit development of additional facilities to those areas where public recreational use of surrounding public lands requires them.
- 8 Construct and/or maintain non-motorized recreational trails as funding and staffing allow. Priority for this work will be placed in the Centennial Mountains, the East Fork Blacktail Deer Creek area, and the Ruby Mountains.

- 9 Consider rental of existing cabins/facilities on public lands for public recreational use on a case-by-case basis.
- 10 Manage each of the nine Special Recreation Management Areas (SRMAs) according to the recreational emphasis specified in Table 6.
- 11 Prepare a Recreation Area Management Plan for the South Pioneers to consider opportunities for motorized and/or mountain bike trail development.
- 12 If the Henneberry Ridge WSA is released and the Rocky Hills area become a designated SRMA and it is determined that the demand for mountain bike opportunities in the Dillon area might be satisfied through development of a trail system in the area, prepare a Recreation Area Management Plan for the Rocky Hills SRMA. Recreational emphasis would be for day use, mountain biking and hiking, and primitive camping.
- 13 Manage Ruby Reservoir as a developed recreation site within the Dillon Extensive Recreation Management Area.



**Table 6**  
**Recreational Emphasis by Special Recreation Management Area**

<i>SRMA</i>	<i>Recreational Emphasis*</i>
Axolotl Lakes	Semi-primitive non-motorized summer recreation use, and both motorized and non-motorized winter use
Big Sheep Creek	Semi-primitive recreation, semi-primitive camping
Centennial Mountains	Primitive and semi-primitive, non-motorized recreation
East Fork Blacktail Deer Creek	Primitive and semi-primitive, non-motorized recreation, with limited camping
Lower Big Hole	River recreation, day use, and semiprimitive camping
Lower Madison	Day use, water based recreation at Ennis Lake, wilderness opportunities in the Bear Trap Canyon, non-motorized, river based recreation with semi-developed camping opportunities along the Lower Madison River
Ruby Mountains	Primitive and semi-primitive non-motorized recreation
South Pioneers	Motorized recreation, mountain biking, day use
Upper Madison	Non-motorized river recreation use, semi-developed camping opportunities

\*Areas identified for non-motorized recreational emphasis will continue to allow motorized access consistent with the approved route designations for those areas (see Maps 26 and 27, oversized), but will not favor management activities that encourage increased motorized recreational use.

- 14 Maintain all existing facilities (listed below) to a standard consistent with the recreational setting, and manage some in partnership with other agencies or groups. Map 24 depicts the location of these areas and facilities.
- a. Axolotl Lakes Cabin
  - b. Bear Trap Trailhead
  - c. Clute's Landing
  - d. Deadwood Gulch
  - e. East Fork of Blacktail Deer Creek
  - f. Fall Creek Day Use
  - g. Kobayashi Beach
  - h. Maiden Rock
  - i. Ney Ranch Recreation Site
  - j. Palisades Campground
  - k. Palisades Day Use
  - l. Powerhouse Boat Launch
  - m. Red Mountain Campground
  - n. Red Mountain South
  - o. Ruby Creek Campground
  - p. Ruby Creek Boat Launch
  - q. Ruby Reservoir
  - r. Canaday (Scanlon) Boat Launch
  - s. Shoshone Ridge
  - t. Trail Creek Picnic Area
  - u. Warm Springs
- 15 Consider development of additional recreational support facilities at the Maiden Rock Boat Launch site on the Lower Big Hole River.
- 16 Develop the Storey Property along the Madison River (within sections 13, 14 and 24 of T.8S, R.1W) to provide a boat launch, parking area and toilet.
- 17 Prepare a management plan in cooperation with FWP for the Axolotl Lakes acquisition lands. Continue management of the Axolotl Lakes acquisition lands under interim management as described in BLM EA #MT-050-2001-13 until the management plan is developed. Interim management provides for:
- a. No permanent grazing allocation
  - b. No recreational facility development
  - c. No special recreation permits for outfitters
  - d. Maintain the integrity of the cabin and pursue a rental program and other administrative uses
  - e. No motorized use *except*: (1) snowmobile use between December 1 and May 15, and (2) motorized administrative uses.
- 18 Establish appropriate use levels in coordination with FWP for BLM launch sites as necessary to ensure main-

tenance of quality recreation opportunities on streams and lakes in the planning area.

- 19 Protect significant cave resources in accordance with the Federal Cave Resource Protection Act of 1988.
- 20 Implement food storage strategies from the Southwest Montana State Grizzly Management Plan (MT FWP 2002) on BLM lands in the Grizzly Bear use areas outside of the Yellowstone Recovery Zone if grizzly bears are delisted. Until the grizzly bear is delisted, monitor the South Madison campground and undeveloped sites in the East Fork of the Blacktail and the Axolotl Lakes area for food storage problems related to grizzly bear use and the potential need for bear proof trash containers. Post major public land trailheads and access points in these areas and in the Centennial Mountains to advise recreationists about proper food storage to avoid back country conflict.

### **Goal 3**

Issue special recreation permits in an equitable manner for specific recreational uses of the public lands and related waters as a means to minimize user conflicts, control visitor use, to protect recreation resources, and to provide for private and commercial recreation use.

### **Allocations**

Establish seven Outfitter Permit Areas (OPAs) as depicted on Map 25 to manage outfitted big game hunting, and manage each OPA according to use levels based on historical use levels. Use levels and allocations to specific outfitters will be established in coordination with those affected within two years of issuance of the ROD that approves the RMP.

### **Actions**

- 1 Authorize special recreation permits in accordance with Special Recreation Permit Handbook 2930-1.
- 2 Manage special recreation permits in accordance with federal regulations, special stipulations, and established terms and conditions.
- 3 Accept, consider, and analyze applications for recreation-related activities on public lands that require a Special Recreation Permit (SRP) other than outfitted big game hunting on a case-by-case basis.
- 4 Maintain but do not increase use levels for outfitted big game hunting above historical levels (pre-2006) within the seven OPAs.
- 5 Accept permit applications for new outfitted big game hunting only if use days are available.

### **Goal 4**

Develop and maintain cooperative relationships with national, state and local recreation providers, tourism entities, and local recreational groups.

### **Actions**

- 1 Maintain cooperation with a variety of user groups, especially in the local area, to provide diverse recreational opportunities for enjoyment of public lands.
- 2 Promote and support recreation-based tourism.
- 3 Complete development and maintenance of sites identified in the 2002 FERC re-licensing agreement for the Missouri-Madison hydroelectric project.

### **Monitoring**

Monitoring of recreation resources will continue to occur throughout the planning area with emphasis placed on developed recreation sites and Special Recreation Management Areas. Monitoring will include regular patrols to check on signing, visitor use, recreation use-related impacts, and user conflicts. Monitoring will also emphasize identification of areas where there may be problems with compliance with rules and regulations resulting in user conflicts or resource damage. Actual visitor and/or vehicle counts will be documented at all developed recreation sites as sites are visited and then projected into an average visitor use. These numbers will then be used to validate recreation use trends. Monitoring of Special Recreation Permits will be conducted for compliance with terms, conditions, and special stipulations, as well as annual monitoring and evaluation of compliance with administrative requirements. Periodic assessments will be made to ensure that uses in Special Recreation Management Areas are consistent with their prescribed recreation opportunity classes.

Average visitor use numbers at developed recreation sites will be reported in the Annual Program Summary and Planning Update to track visitor use and recreation use trends over time. The number of recreation management plans prepared and special recreation permits issued will also be reported in the Annual Program Summary and Planning Update.

## **RENEWABLE ENERGY**

### **Goal**

Provide opportunities for the development of renewable energy resources from sources such as wind, biomass, solar, and low-impact hydropower while minimizing adverse impacts to other resource values.

### Actions

- 1 Analyze proposals for the development of renewable energy resources from sources such as wind, biomass, solar, and low impact hydropower on a case-by-case basis. Although no areas would be specifically designated for renewable energy development, opportunities for such development would be provided to the extent consistent with other goals, objectives, and requirements of the land use plan.
- 2 Consider designated right-of-way avoidance and exclusion areas as well as designated right-of-way corridors and use areas in those situations in which a renewable energy project would require a right-of-way.
- 3 Manage rights-of-way proposals for renewable energy consistent with the provisions in the "Land Use Authorizations" portion of the *Lands and Realty* section of this plan.
- 4 Adopt Best Management Practices (BMPs) related to renewable energy development, including but not limited to those proposed in BLM's Programmatic Wind Energy EIS, and apply when and where applicable.

### Monitoring

Renewable energy projects will be monitored through the BLM accomplishment tracking process. Where renewable energy projects require land use authorizations, monitoring will be conducted in accordance with the monitoring of Goal 1 in the *Lands and Realty* section.

## RIPARIAN AND WETLAND VEGETATION

### Goal

Restore and maintain riparian wetland areas so that at least 955 miles of streams and 2,050 acres of wetlands are in proper functioning condition. Design management to achieve objectives (Desired Future Conditions) or initiate an upward trend in 20 years.

### Objectives (Desired Future Condition after 20-50 years of management)

Riparian and wetland vegetation supports the biological, hydrologic, and physical components of streams and wetlands based on site-specific capabilities.

Deciduous woody and coniferous communities are present with diverse composition, density, and age structure within site potential.

Herbaceous plant communities are dominated by deep-rooted native species that support streambank and shoreline stability, floodplain development, and nutrient cycling.

Stream channels display the dimensions, pattern, and profile that are representative of site potential (Rosgen).

Emphasize maintenance of riparian communities on approximately 415 miles of stream dominated by a tall deciduous shrub or aspen/cottonwood habitat types and on approximately 500 miles of stream dominated by herbaceous and coniferous habitat types (based on 2002 inventory summary). This will involve the following shifts in vegetation communities from existing conditions toward the desired future condition:

	Existing		Desired	
	Percent	Miles	Percent	Miles
Conifer types	45%	413	25%	228
Aspen/cottonwood types	15%	137	20%	183
Tall shrub types	30%	274	40%	365
Herbaceous, misc. types	10%	91	15%	137

### Allocations

Maintain all current riparian exclusions as unleased for live-stock grazing.

### Actions

- 1 Implement riparian and wetland management consistent with state and federal law and regulation.
- 2 Take actions to cooperatively conserve riparian/wetland habitat, minimize the destruction, loss or degradation of wetlands, and preserve values served by floodplains where occurring on public land while reducing hazards to human safety.
- 3 Implement the *Western Montana Standards for Rangeland Health* (see Appendix A) to achieve proper functioning condition in riparian and wetland habitats. Incorporate of the *Guidelines for Livestock Grazing*, as well as strategies outlined in *Best Management Practices for Grazing* (MT DNRC 1999), when applicable.
- 4 Increase the amount of properly functioning habitat (PFC) from 18 percent to 50 percent, decrease functional-at-risk (FAR) habitat from 59 percent to 30 percent, and reduce nonfunctional habitat (NF) from 23 percent to 20 percent. Implement a full array of management actions including limiting grazing treatments to less than 30 days if necessary.
- 5 Restore approximately 100 miles of deciduous riparian habitat types that have a high composition of conifers (juniper, Douglas-fir or spruce) back to a tall deciduous shrub or aspen/cottonwood habitat type, using the following class strategy. Focus these actions only on riparian areas retaining at least a 10-15 percent

woody deciduous canopy. Multiple classes may occur on a given stream reach but no individual class should represent less than 25 percent of existing conditions for treatment purposes.

- Class 1 – Conifer canopy <10 trees/acre and <5 percent canopy, Rosgen channel types A or B– no treatment
  - Class 2 – Conifer canopy 10-50 trees/acre and 5-15 percent canopy, Rosgen channel types C or E – use mechanical methods to reduce canopy to Class 1, leaving materials on-site to restrict ungulate access and enhance stream channel characteristics and stability.
  - Class 3 – Conifer canopy 15-50 percent uniformly distributed throughout riparian reach, Rosgen channel types C or E - use appropriate methods to reduce conifer canopy to Class 1 while maintaining or promoting riparian proper functioning condition. However, no mechanized equipment would be allowed within the riparian zone (with the exception of chainsaw use), and no new road construction would be authorized. Up to 70 percent of material may be removed, with remainder left on-site to restrict ungulate access and enhance stream channel characteristics and stability.
  - Class 4 – Spruce/Douglas-fir canopy >50 percent in distinct stands, Rosgen channel types A, B - no treatment.
  - Class 5 – Juniper canopy >50 percent - reduce canopy and numbers to Class 1, using appropriate methods as in Class 3. In addition, special consideration will be given to channel stability needs and site protection from ungulate use for an extended time period.
- 6 Develop and apply site-specific objectives and management strategies for riparian and wetland areas through implementation of activity plans.
  - 7 Coordinate with FWP on proposed vegetation treatments.
  - 8 Coordinate with FWP when considering the use and management of beavers as a tool to enhance riparian habitat conditions.
  - 9 Complete routine maintenance annually on all exclosures prior to livestock turnout.
  - 10 Monitor exclosures to compare differences between areas grazed and ungrazed by livestock.
  - 11 Update and revise the Red Rock Waterfowl Habitat Management Plan to emphasize wetland habitat improvement to benefit wetland-dependent species as well as maximize opportunities to reestablish and maintain

trumpeter swan occupancy. Pursue cooperative management on co-owned public/private wetlands to enhance habitat capabilities and water availability.

- 12 Manage the density and height of emergent wetland vegetation (cattails, rushes, etc.) to provide residual nesting cover and concealment for trumpeter swans and other waterfowl within the wetland and waterfowl production areas in the Centennial Valley (see Map 36).
- 13 Analyze water developments on a case-by-case basis, considering the following:
  - Available water flow. In general, no water developments that remove more than 50% of average summer daily flows from a water source will be constructed unless systems can be designed for return flows back into the drainage within a 1/4 mile of the diversion.
  - Protection of source water riparian and wetland habitat. Where isolated springs are developed, associated riparian habitat will be protected, usually through fencing.
  - Protection of other resource values from direct and indirect impacts from construction and use of the water source. Measures to protect riparian habitats and other resource values including but not limited to sensitive plant species and cultural resources will be implemented based on site-specific needs. Only off-stream water developments and/or armored water gaps will be considered on streams where fencing has excluded the riparian area to prevent impacts to various resources.
  - Location of water tanks in relation to other resource values. Measures to protect resource values in proximity to tank locations will be implemented based on site-specific needs. In general, water tanks will be placed at least 1/4 mile from unfenced stream riparian habitat.
- 14 Emphasize the use of temporary let-down wire fence with permanent posts where fencing is necessary to protect riparian habitats from livestock grazing, and in other situations where permanent fencing is not necessary.

### **Monitoring**

Changes in miles/acres of riparian/wetland in proper functioning condition will be determined during watershed evaluations (see Map 20 for watershed areas) using the procedures outlined in BLM Technical References TR 1737-15 and TR 1737-16 (Prichard et. al 1998, 2003). Changes in vegetation communities will also be determined during these assessments.

Riparian/wetland plant community characteristics will be inventoried and monitored to establish trends in plant composition, canopy, age class diversity, and utilization that in-

dicating progress toward desired plant communities and properly functioning riparian conditions. The 1995 Montana Riparian Wetland Association inventory and assessment methodology (updated as necessary) will serve as the baseline to provide comprehensive plant community composition and canopy.

Rosgen inventories will provide baseline channel morphology information and identify site potential. Simple stream cross sections can also be used to provide estimates of width depth ratios and channel profiles.

In general, all riparian/wetland vegetation studies should be duplicated prior to the completion of watershed evaluations (see Map 20 for watershed areas). Frequency of monitoring activities will be defined in the Watershed Assessment Plans. Monitoring studies in individual activity plans and watershed assessments will reflect site-specific and area-wide progress toward desired future conditions.

The number of miles/acres that meet the Riparian/Wetland standard in the Western Montana Standards for Rangeland Health and the total number of miles/acres assessed will be reported in the Annual Program Summary and Planning Update. Miles/acres converted from conifer to deciduous and/or herbaceous riparian habitats will also be reported.

## SOCIAL CONDITIONS

### *Goal*

Provide for a diverse array of activities that result in social benefits while minimizing negative social effects.

### *Action*

- 1 Evaluate and disclose impacts in accordance with provisions of NEPA and other guiding statutes as part of implementation level planning when it appears actions taken by the BLM DFO have the potential to affect social conditions.

### *Monitoring*

None identified.

## SOILS

### *Goal*

Maintain or improve soil health or fertility, prevent, or minimize soil erosion and compaction, and reduce the possibility of mass wasting on unstable soils.

### *Actions*

- 1 Consider soil conditions and types and their influence during watershed and activity level planning. Diagnose soil compaction and erosion problems using the *Western Montana Standards for Rangeland Health*.

- 2 Give greatest consideration to soils susceptible to compaction and erosion when assessing proposed activities.
- 3 Maintain canopy cover determined necessary to protect unstable soils.
- 4 Implement Best Management Practices (BMPs) (see Appendix B) and any necessary mitigation measures at the site-specific project level to maintain or improve the soil resource.
- 5 Apply appropriate mitigation measures including seasonal restrictions on activities authorized by BLM in areas with significant soil compaction or erosion.
- 6 Consider the intensity of the disturbance when addressing activities proposed in slump or unstable areas. Require detailed engineering design, geologic analysis, and mitigation plans for surface-disturbing projects proposed in areas of suspected instability. Surface disturbance associated with timber harvest will be allowed on unstable soils if acceptable techniques are applied to mitigate the possible negative effects of mass wasting.
- 7 Provide for the conservation and protection of the basic rangeland resources, soil and vegetation, during periods of drought. Modify grazing schedules and live-stock management practices as necessary in order to conserve and protect soil during periods of drought.

### *Monitoring*

A sample of ground-disturbing projects with the potential to affect soil resources will be evaluated on a periodic basis to determine if best management practices or identified mitigation measures were followed and if they were effective. Results will be reported in the Annual Program Summary and Planning Update. The number of allotments/acres that met the Upland and Riparian standards in the *Western Montana Standards for Rangeland Health* and the total number of allotments/acres assessed will also be reported in the Annual Program Summary and Planning Update.

## SPECIAL STATUS SPECIES

See the respective sections for *Fish and Special Status Fish*, *Special Status Plant*, and *Wildlife and Special Status Birds and Mammals*.

## SPECIAL STATUS SPECIES – PLANTS

### *Goal 1*

Identify, conserve, and monitor rare, vulnerable, and representative habitats, plant communities, and ecosystems to

ensure that there is a self-sustaining persistence of special status plants within the DFO.

### **Goal 2**

Ensure that proposed land uses initiated or authorized by BLM avoid inadvertent damage to federal and non-federal habitats supporting special status plants and plant communities.

### **Goal 3**

Promote public awareness, appreciation and understanding of rare plants and their habitats.

### **Objective (Desired Future Condition)**

The necessary habitat, biological processes, and disturbance regimes are present on DFO lands to maintain or enhance populations of special status plant species.

### **Allocations**

Limit livestock grazing authorizations to the non-growing season in the following allotments or pastures to benefit BLM special status plant species:

- the Frenchie Allotment #10121 (combined from the former Frenchie Allotment # 10121, Timber Butte Allotment #20168, and Cold Spring Allotment #20215)
- the Spring Creek Pasture of the Stonehouse Allotment #30005

Do not issue a term grazing permit or lease in the Eli Spring area (south half of section 3, north half of section 10, T9S, R11W) though temporary non-renewable grazing could be authorized to meet objectives.

### **Actions**

- 1 Ensure that habitat is provided for special status species, and that proposed actions do not jeopardize the continued existence of a threatened or endangered species, or cause its habitat to be adversely modified or destroyed.
- 2 Consult with USFWS when impacts are anticipated to threatened or endangered species or designated habitat.
- 3 Cooperate in implementation and monitoring of recovery plans, State of Montana management plans, and conservation strategies for all listed, recently delisted, and candidate species.
- 4 Implement management plans prepared for species not yet delisted in coordination with the State of Montana and other appropriate agencies once the species is delisted by the USFWS.

- 5 Enhance, restore and/or maintain habitat conditions and availability for special status species and prevent all avoidable loss of habitat.
- 6 Manage special status species habitats and populations using multi-scale assessments to identify current conditions, risks and opportunities.
- 7 Treat sensitive species as candidate species for project impact analysis.
- 8 Complete biological evaluations for projects for all special status plant and animal species using the joint format developed in conjunction with the Beaverhead-Deerlodge National Forest (see Appendix F).
- 9 Consider conservation strategies for sensitive species not listed under the Endangered Species Act when issuing land use authorizations.
- 10 Continue to assist in maintaining Montana's web-based rare plant field guide.
- 11 Assist with programs and training sessions to educate weed crews to recognize and avoid special status plants and their habitats.
- 12 Continue inventory efforts and consider monitoring efforts and research studies on special status plants and associated plant communities.
- 13 Consider the potential for adverse effects on BLM sensitive plants during project level planning and recommend mitigation measures.
- 14 Conduct field inspections to identify special status plant species prior to authorizing surface disturbing activities. Grant waivers for on-the-ground inventory in areas determined to have low potential based on previous research.
- 15 Do not allow activities that disturb mineral soil (such as blading, plowing, ripping, chaining, etc.) within the boundaries of populations of BLM special status plants.
- 16 Adjust management on a case-by-case basis when the *Western Montana Standards for Rangeland Health* are not being met or when monitoring of BLM special status plants indicates unacceptable impacts.
- 17 Adopt or develop habitat management plans and conservation strategies for BLM special status plant species and habitats that occur on public land in concert with watershed assessments. In riparian habitats, place priority on the following species:

- a. *Carex idahoensis* (Idaho Sedge)
- b. *Primula alcalina* (Alkali Primrose)
- c. *Taraxacum eriophorum* (Rocky Mountain Dandelion)
- d. *Thalictrum alpinum* (Alpine Meadowrue)

In sagebrush-steppe habitats, place priority on the following species:

- a. *Penstemon lemhiensis* (Lemhi Beardtongue)
- b. *Astragalus scaphoides* (Bitterroot Milkvetch)
- c. *Astragalus terminalis* (Railhead Milkvetch)

- 18 Protect the relevant and important special status plant values in the Centennial Sandhills ACEC (see Map 8) with the following special management:

- a. Implement management strategies to destabilize sand dunes and maintain the unique habitat within the sandhills area and create early seral habitat for special status plant species (for example, treat with prescribed fire followed by short-term high intensity grazing). Non-mechanical disturbances are preferred, but mechanical disturbances may be employed if non-mechanical methods are not effective at maintaining habitat.
- b. Continue inventory, monitoring and research studies of special status plant species and habitats.
- c. Prohibit aerial application of herbicides and pesticides within the ACEC boundary, but allow for other weed control methods in consideration of the special status plant values.

Other standard management provisions that will assist in protection of the relevant and important values include:

- No authorization of mineral material sites within the ACEC boundary
- No Surface Occupancy stipulations on oil and gas leasing within 1/4 mile of special status plants.
- Limiting vehicular travel to roads and trails designated as "open".

### **Monitoring**

Surveys will be conducted to determine the distribution, resource conditions, and trends of special status plant species and representative habitats. This will include determining plant composition at the site, checking for invasion of exotic species, monitoring localized disturbances (from OHV use, livestock and wildlife use, recreational use, etc.), and determining trends in special status plant attributes. Monitoring methods will include establishing photo points and doing periodic ocular surveillance. Trends in special status plants and vegetation will be determined through such things as demographic studies, density, cover, and frequency (inside enclosures versus open areas). Methods to accomplish this could include establishing new rare plant enclosures to determine effects of use versus nonuse, developing

conservation agreements/conservation strategies, and conducting vegetative attribute sampling in accordance with BLM Technical Reference 1730-1, "Measuring and Monitoring Plant Populations" (Elzinga, Salzer & Willoughby 1998).

The number of allotments/acres that meet the Biodiversity standard in the *Western Montana Standards for Rangeland Health* relative to special status plants and the total number of allotments/acres assessed will be reported in the Annual Program Summary and Planning Update. The number of acres inventoried annually for special status plants will also be reported.

## **TRANSPORTATION AND FACILITIES MAINTENANCE**

### **Goal 1**

Manage facilities, including roads and trails, to provide for public access or administrative needs, while maintaining or protecting resource values and in coordination with other federal agencies, state and local governments, and private landowners.

### **Actions**

- 1 Inventory and maintain transportation system roads and trails under BLM jurisdiction in accordance with assigned maintenance levels as outlined in Appendix O to meet public health and safety requirements, but also in consideration of resource issues including but not limited to proliferation of weeds and disturbance of cultural resources.
- 2 Maintain other facilities such as boat ramps, communication facilities, etc. according to Bureau standards and to meet public health and safety requirements.
- 3 Maintain non-system roads under BLM jurisdiction on an as needed basis, dependent on time, funding, and access priorities. Where problems exist with non-essential roads, close and rehabilitate those roads if the expenditure of funds is justified.
- 4 Roads and trails on BLM-administered land under the jurisdiction of other entities will be maintained by the appropriate holder of rights within the provisions of the granting authority or right.
- 5 Analyze new road, trail, or facility construction on a case-by-case basis.
- 6 New roads determined by BLM to be necessary on a temporary basis will be constructed to the minimum standard necessary for the activity proposed, and closed or reclaimed when use is over.

- 7 New roads determined by BLM to be necessary for permanent or long-term use as part of BLM's transportation system will be constructed in consideration of the type of use and level of road necessary and in accordance with standards and guidelines in BLM Handbook 9113. Also see *Travel Management* Actions 8, 9, and 10.
- 8 Manage the road system to maintain no net change in roads designated open over the long term (with a baseline of 1,342 miles of open road) when wildlife issues (wildlife displacement, habitat fragmentation, road density) or other resource issues are identified in regard to "new roads" (roads that were not identified in the 2002 inventory). However, manage for an open road density not to exceed one mile per square mile if resource issues related to road density are identified, considering both existing and new roads within a project level cumulative effects area. Seasonal restrictions may be used to mitigate resource concerns by reducing the open road density during periods of concern. Where a greater density of short-term temporary roads is necessary to support specific projects, new project roads will be evaluated at project completion, and if necessary, route designations will be changed to provide the most appropriate access routes in consideration of wildlife or other resource management needs. In areas where resource issues are not identified, do not increase the number of "new roads" by more than one percent of the baseline (1,342 miles) over the life of the plan. To meet these provisions, mileage of new road can be offset by closing existing roads.

### ***Monitoring***

The condition of BLM facilities will be assessed in accordance with procedures under development by the BLM National Condition Assessment Program. Comprehensive condition assessments (CCA) will be completed at recreation sites and administrative sites on a five year schedule, with periodic inspections (PIs) at least every three years. CCAs are detailed, formal inspections to verify and update the inventory and condition data in the Facility Asset Management System (FAMS). PIs are a quick "walk through" review to verify existing FAMS data on inventory and condition. Similar assessments in accordance with procedures currently under development will be conducted for road and trail facilities. However, road and trail condition assessments will need to be prioritized in the planning area, and only a sample of the roads and trail system might be completed on an annual basis. Inspection procedures required for dams and bridges to ensure public safety will be continued as required by law. With all facilities, informal inspection and "discovery" will be a major part of the condition monitoring program. Information provided by BLM employees and the public on problems or concerns as a result of storms, vandalism, and/or normal wear and tear to facilities will also be used to monitor the condition of BLM facilities.

The number of facilities and miles of roads assessed annually will be reported in the Annual Program Summary and Planning Update.

## **TRAVEL MANAGEMENT AND OHV USE**

Note: All acreage and mileage numbers provided within this section are approximate.

### ***Goal***

In coordination with other federal agencies, state and local governments, and private landowners, manage motorized travel to provide recreational experiences while maintaining or protecting resource values.

### ***Allocations***

#### **Wheeled Motorized Use/Non-Motorized Use**

Manage no areas as "open" under the regulations at 43 CFR Part 8340-8342.

Manage 826,876 acres as "limited" to designated routes for OHV use under the regulations at 43 CFR Part 8340-8342.

- Designate approximately 1,342 miles of road on BLM lands as open to public travel as shown on Maps 26 and 27 (oversized).
- Make 159 miles of the 1,342 miles of road subject to seasonal restrictions

Manage 74,350 acres as depicted on Map 28 as "closed" to OHV use under the regulations at 43 CFR Part 8340-8342. (Although some of these areas contain short segments of roads which will continue to be open to vehicles at least seasonally, these road segments do not provide access to the majority of acres in the area identified as closed. By contrast, other areas currently identified as closed to all motor vehicles, but with designated routes providing access to the majority of the area, are identified as "limited" in accordance with the definition provided in 43 CFR Part 8340.0-5 (g)).

#### **Snowmobiles**

Manage 138,169 acres as closed to snowmobile use (see Map 29) in the following areas:

- Bachelor Mountain area
- Bear Trap Wilderness
- Blacktail Mountains WSA
- Centennial Mountains WSA
- East Fork Blacktail Deer Creek WSA
- Farlin Creek WSA
- Hidden Pasture WSA
- Ruby Mountains WSA
- T15S, R9W, Section 1 (near East Creek, Lima Peaks area)

Other miscellaneous areas adjacent to Forest Service closures

Manage the remaining lands in the planning area (approximately 763,057 acres) as available for snowmobile use during some or all of the year, as specified on the Southwest Montana Interagency Visitor/Travel Plan Map.

### **Actions**

- 1 Promote the use of shared trails whenever possible.
- 2 Manage travel within the Centennial Mountains according to the decisions made in the Centennial Mountains Travel Management Plan (USDI-BLM 2001a). Important elements of that decision which are not reflected on the 1996 edition of the Southwest Montana Interagency Visitor/Travel Map include:
  - a. Closure of a portion of the Corral Creek Road to motorized vehicle use
  - b. Closure of the Price-Peet Road beyond the constructed segment to motorized vehicle use
  - c. Limiting all motorized wheeled vehicle travel to designated routes
  - d. Closure of the area to mountain bike use except on routes designated open to motorized vehicle use
- 3 Consider development or construction of motorized and/or mountain bike routes on a case-by-case basis, especially in the south end of the Pioneer Mountains to create loop routes to connect public and Forest Service roads.
- 4 Construct and/or maintain non-motorized recreational trails as funding and staffing allow. Priority for this work will be placed in the Centennial Mountains, the East Fork Blacktail Deer Creek area, and the Ruby Mountains.
- 5 Update and maintain the road and trail database to correct mapping errors and refine decisions.
- 6 Based on monitoring, amend, revise, revoke, or take other action to protect resources and public safety and minimize conflict among uses in accordance with 43 CFR Part 8364.
- 7 Continue to participate with the Southwest Montana Interagency Travel Management Committee (preparers of the Southwest Montana Interagency Visitor/Travel Map) using Maps 26 and 27 (oversized) as the baseline route designation maps across BLM lands.
  - Maps 26 and 27 (oversized) reflect those routes that would be open to travel by the general public *if* access is available (across private or other lands) *to* those routes that exist on public lands. Prior to producing an interagency travel map for use by the general public, eliminate those routes where no access is available to reach the public lands. (However, showing those routes on Maps 26 and 27 (oversized) as designated open for public use within this plan will allow for future use of that route if access becomes available to reach them).
- 8 Evaluate "existing routes" not included in the inventory base (and thus not considered in this plan) on a case-by-case basis through an environmental analysis process to determine whether they should be open to public travel. In order to be considered an existing route, the route must be able to be verified to have been present on the ground no later than the 2002 inventory season. Designate routes determined to enhance public access opportunities, and not in conflict with management of other resources as open and add them to the Southwest Montana Interagency Travel/Visitor Map through routine plan maintenance. Continue to use the principles developed by the Western Montana RAC (see Appendix P) when considering travel management modifications.
- 9 Evaluate "new roads" on a case-by-case basis through an environmental assessment process to determine whether they will be open to public travel. "New roads" means roads that do not presently exist but are necessary for access to timber sales, mining activities, to provide general access, or to facilitate other authorized uses of public lands. Designate routes determined to enhance public access opportunities that do not conflict with management of other resources as open and add them to the travel management map through routine plan maintenance.
- 10 Manage the road system to maintain no net change in roads designated open over the long term (with a baseline of 1,342 miles of open road) when wildlife issues (wildlife displacement, habitat fragmentation, road density) or other resource issues are identified in regard to "new roads" (roads that were not identified in the 2002 inventory). However, manage for an open road density not to exceed one mile per square mile if resource issues related to road density are identified, considering both existing and new roads within a project level cumulative effects area. Seasonal restrictions may

be used to mitigate resource concerns by reducing the open road density during periods of concern. Where a greater density of short-term temporary roads is necessary to support specific projects, new project roads will be evaluated at project completion, and if necessary, route designations will be changed to provide the most appropriate access routes in consideration of wildlife or other resource management needs. In areas where resource issues are not identified, do not increase the number of "new roads" by more than one percent of the baseline (1,342 miles) over the life of the plan. To meet these provisions, mileage of new road can be offset by closing existing roads.

- 11 Allow motorized cross-country or route travel to occur without prior permission in areas closed to motorized travel for the following activities:
  - a. Military, fire, search and rescue, and law enforcement operations for emergency purposes.
  - b. BLM personnel, or agency contractors, performing official administrative business (e.g., prescribed fire, noxious weed control, revegetation, surveying, etc.). Where possible, personnel will place a sign or notice in the area they are working in to identify for the public the function they are authorized to perform.
  - c. Lessees and permittees performing administrative functions on public lands within the scope of a permit or lease. Some examples of administrative functions include, but are not limited to gas or electric utilities monitoring a utility corridor for safety conditions or normal maintenance, accessing a remote communication site for normal maintenance or repair, livestock permittees checking vegetative conditions, building or maintaining fences, delivering salt and supplements, moving livestock, checking wells or pipelines as part of implementation of the grazing permit or lease, and scientific groups under contract for resource assessments or research. This provision does not preclude modifying permits or leases to limit motorized cross-country travel during further site-specific analysis to meet resource management objectives or standards and guidelines.
  - d. For dispersed camping up to 300 feet from roads or trails, except within the Lower Madison River SRMA. Site selection must be completed by non-motorized means and accessed by the most direct route. Future area-specific planning and rulemaking may also identify areas where this exception will not apply.
  
- 12 Allow motorized cross-country or route travel on a case-by-case basis with prior written permission of the Field

Manager in areas closed to motorized travel for the following activities, including but not necessarily limited to:

- a. Travel for non-BLM associated personnel on administrative business such as noxious weed control, surveying, animal damage control, etc. When possible, the authorized party performing the administrative function will place a sign or notice in the area they are working to identify for the public the function they are authorized to perform.
  - b. Travel by entities requiring access to private lands, resources, or legal improvements within or adjacent to closed or limited areas. Access will be allowed to the degree necessary to provide for reasonable use and enjoyment of that property where no reasonable alternatives exist.
  - c. Travel necessary to conduct mining-related casual use activities (see 43 CFR Part 3809.5(1)) such as claim staking, annual assessment work, and the collection of geochemical, rock, soil or minerals using hand tools.
  - d. Travel for personal use permits such as firewood and Christmas tree cutting if specifically provided for on the permit. Exception areas identified on the Southwest Montana Interagency Visitor/Travel Map will not require prior written permission.
- 13 Prohibit game retrieval using motorized vehicles except on designated travel routes.
  - 14 Consider access for people with disabilities under Section 504 of the Rehabilitation Act of 1973 on a case-by-case basis. Identify specific areas annually, if necessary, to provide for disabled hunter access on existing routes where seasonal road closures restrict general public access beyond locked gates.
  - 15 Adjust travel route designations as necessary when a process is in place to address R.S. 2477 assertions.

### ***Monitoring***

Travel management and OHV use monitoring within the planning area will focus on compliance with specific route and area designations and restrictions, with primary emphasis on those routes or areas causing the highest levels of user conflicts or adverse impacts to resources. Various methods of monitoring may be employed including; aerial monitoring, ground patrol, "citizen watch," and appropriate methods of remote surveillance such as traffic counters, etc. Route or area closures will be regularly monitored for compliance. Cooperation with other agencies in travel management and OHV use monitoring will continue to be emphasized, and improved wherever possible.

## TRIBAL TREATY RIGHTS

### Goal

Accommodate treaty and legal rights of appropriate Native American groups in management of public lands.

### Actions

- 1 Continue to notify and consult with appropriate Native American tribes on BLM authorized actions. Conduct consultation and coordination on a government-to-government basis with Federally recognized tribes.
- 2 Accommodate the exercise of rights provided by treaties applicable to the planning area. Coordinate with the appropriate entities within tribal government on issues under its jurisdiction to determine appropriate protocols that provide for treaty uses of public lands.

### Monitoring

A minimum of one "face-to-face" general consultation and project coordination meeting will be held on an annual basis with the appropriate representatives from the Confederated Salish and Kootenai Tribes of the Flathead Reservation, and the Shoshone-Bannock Tribes of the Fort Hall Reservation. Consultation meetings will be held with the appropriate representatives of other tribes as requested or as deemed necessary. Additional project specific coordination will be conducted as necessary, particularly for projects involving timber sales, land exchanges, oil and gas development, etc., with notification by mail and telephone conversation to determine additional consultation needs. The appropriate tribal representatives will also be maintained on the Field Office NEPA and project notification mailing lists.

Dates of consultation meetings and other tribal contacts will be reported in the Annual Program Summary and Planning Update.



## UTILITY AND COMMUNICATION CORRIDORS

### Goal 1

Encourage the use of designated right-of-way corridors and use areas to the extent practical in order to minimize adverse environmental impacts and the proliferation of separate rights-of-way.

### Allocations

Manage five (5) areas as designated right-of-way use areas for communication sites (see Map 17):

- Armstead Mountain
- Maurer Mountain
- Pipe Organ
- Bear Trap
- Virginia City Hill.

Encourage (but do not require) applicants to locate within these five designated right-of-way use areas. Require new facilities locating within existing communication site areas (see Map 17) to conform with the designated uses for each respective site (see Table 7, also shown as Table 4 in the *Lands and Realty Section*).

Manage two of the existing right-of-way corridors delineated in the 1992 "Western Regional Corridor Study" as designated right-of-way corridors where they cross public lands (see Map 17). These corridors are each currently occupied by an electrical transmission line. Nominal corridor width will be 1,320 feet (1/4 mile) on each side of centerline of the existing facilities, except where the alignment forms the boundary of a Special Management Area, where the width will be 2,640 feet (1/2 mile) on the side opposite that boundary. Applicants for electrical transmission lines 69 kV and larger and pipelines 10 inches in diameter and greater will be encouraged to locate such facilities within these two designated corridors.

Manage the Bear Trap Unit of the Lee Metcalf Wilderness and the Beaverhead Rock ACEC as a designated right-of-way exclusion area (see Map 17). No new rights-of-way will be granted in these areas. However, any valid existing rights-of-way will be recognized and holders of such authorizations will be allowed to maintain their facilities.

Manage approximately 123,286 acres within the nine Wilderness Study Areas and the Lewis and Clark Trail as designated right-of-way avoidance areas where the issuance of new rights-of-way will be avoided unless there are no other options and authorization in any WSA will be consistent with the *Interim Management Policy for Lands Under Wilderness Review* (see Map 17). Valid existing rights-of-way in right-of-way avoidance areas will be recognized and holders of such authorizations will be allowed to maintain their facilities.

**Table 7  
Communication Sites, Locations, and Designated Use Categories**

<i>Communication Site</i>	<i>Legal Description ** (Principal Meridian, Montana)</i>	<i>Designated Use</i>
Armstead Mountain	SE1/4 NE1/4, Sec.34., T.10S, R.11W	Low Power; Non-Broadcast
Pipe Organ	SW1/4 NE1/4, Sec.4, T..9S, R.10W	Low Power; Non-Broadcast
Maurer Mountain	NE1/4 NW1/4, Sec.29, T.10S, R..9W	Low Power; Broadcast and Non-Broadcast
Bear Trap	SE1/4 NE1/4, Sec.18, T.4S, R.1E	Low Power; Non-Broadcast
Baldy Ridge	NE1/4 SE1/4, Sec.26, T.7S, R.3W	Government Use Only
Badger Pass (Bannack)	NE1/4 NW1/4, Sec.22, T.7S, R.11W	Low Power; Non-Broadcast, (Existing Facility Only)
Barton Gulch	SE1/4 SW1/4, Sec.12, T.7S, R.4W	Resource Monitoring
Lakeview Ridge	Lot 4 of Sec.26 and Lot 1 of Sec.27, T.14S, R.2W	Resource Monitoring
Monida Pass	NE1/4 NE1/4, Sec.25, T.14S, R.7W	Resource Monitoring
VC Hill	NE1/4 SW1/4, Sec.32, T.6S, R.2W	Low Power; Non-Broadcast
<p>** These legal descriptions do not delineate the boundaries of the right-of-way use areas, but give approximate locations. Boundaries of the use areas are/will be defined in individual site plans.</p>		

**Actions**

**Note: Actions described under the *Lands and Realty* section and not repeated here still apply to *Utility and Communication Corridors* and related authorizations.**

- 1 Do not require rights-of-way, leases, permits, or easements for those activities that are considered casual use of public lands.
- 2 Analyze requests for land use authorizations on a case-by-case basis and apply mitigation measures as necessary in compliance with the NEPA process.
- 3 Locate new right-of-way facilities within or adjacent to existing rights-of-way, to the extent practical, in order to minimize adverse environmental impacts and the proliferation of separate rights-of-way.
- 4 Develop site plans for each of the designated communication site use areas and update periodically as necessary. Boundaries of the use areas will be defined by these site plans.
- 5 Group new communication site users into suitable existing sites to reduce impacts and expedite application processing. Encourage applicants for communication

site facilities to locate within the five designated use areas. Map 17 shows existing authorized communication sites and designated use areas.

- 6 Require site plans to be completed prior to authorizing any new areas for communication sites. Consider the use of alternative energy sources where electric power is not available.
- 7 Where avoidance areas and designated corridors overlap (e.g., the Lewis and Clark Trail and the designated corridor through the Beaverhead River Canyon), issuance of new rights-of-way and upgrade/expansion of existing rights-of-way will be allowed if mitigative measures can reduce impacts to resources of concern to an appropriate level.
- 8 Provide access across public lands to and along right-of-way corridors and use areas necessary to construct new facilities, except in avoidance areas where access would be considered on a case-by-case basis.
- 9 Permit other uses of right-of-way corridors and use areas to the extent they do not interfere with or preclude the use of these locations for their intended purpose and are consistent with other portions of the plan.

**Monitoring**

The effectiveness of the existing right-of-way corridors and right-of-way use areas will be discussed during the periodic meetings of management, realty personnel and key DFO staff described in the monitoring for Goal 1 in the *Lands and Realty* section. The need for additional corridors and use areas will also be discussed during these meetings. Periodic on-the-ground inspections of the corridors and use areas will be conducted to ensure they are being managed correctly and that conflicting uses are not occurring which could preclude the use of these locations for their intended purpose.

**VISUAL RESOURCES**

**Goal**

Manage scenic values in accordance with the objectives established for VRM classes as presented in Table 8.

**Allocations**

Map 30 depicts the location of the VRM classes across the planning area.

Manage approximately 128,269 acres under VRM Class I in the following areas:

- Bear Trap Wilderness
- All Wilderness Study Areas

If released, each respective WSA would be managed as specified in Appendix Q.

Manage approximately 30,810 acres, including lands around the Axolotl Lakes area and lands within the Virginia City Historic Landmark boundary as VRM Class II.

Manage approximately 723,585 acres as VRM Class III.

Manage approximately 18,412 acres as VRM Class IV, including the following areas with past or present mining operations:

- active Placer Operations located east of Bannack State Park
- Ermont Mining District
- Rochester Mining District
- Silver Star Mining District
- Revenue Mining District

**Actions**

- 1 Use the visual resource contrast rating system during project level planning to determine whether or not proposed activities will meet VRM objectives. Identify mitigation measures to reduce visual contrasts and prepare rehabilitation plans to address landscape modifications on a case-by-case basis.
- 2 Protect the relevant and important scenic values in the Centennial Mountains ACEC with the following special management:
  - a Incorporate landscape design principles into vegetation treatments

<b>Table 8 Visual Resource Management Class Objectives</b>
<b>Class I</b>
Preservation of the landscape is the primary management goal in Class I areas. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.
<b>Class II</b>
The objective of this class is to retain the existing character of the landscape. Activities or modifications of the environment should not be evident or attract the attention of the casual observer. Changes should repeat the basic elements of form, line, color and texture found in the predominant natural features of the characteristic landscape.
<b>Class III</b>
The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention, but should not dominate the view of the casual observer. Changes caused by management activities may be evident but should not detract from the existing landscape.
<b>Class IV</b>
Class IV VRM objective is to provide for management activities which require major modification of the existing character of the landscape. Changes may attract attention and be dominant landscape features but should reflect the basic elements of the existing landscape. Class IV rating is generally reserved for areas where the visual intrusions dominate the viewshed but are in character with the landscape (areas such as rural communities, multiple subdivisions, mining developments, etc.).

3 Protect the relevant and important scenic values in the Muddy Creek/Big Sheep Creek ACEC with the following special management:

- a. Apply special provisions if necessary to protect scenic values during any project activities (including but not limited to locatable mineral proposals)

Other standard management provisions that will assist in protection of the relevant and important values include:

- a. Management of the area under VRM Class II

### **Monitoring**

Any project design features or mitigation measures identified to address visual resource management concerns will be monitored to ensure compliance with established VRM classes. Where appropriate, monitoring will include the use of the visual contrast rating system, described in BLM Manual 8400 during project review and upon project completion to assess the effectiveness of project design features and any mitigating measures.

The number of areas/projects monitored for compliance with VRM objectives will be reported in the Annual Program Summary and Planning Update.

## **WATER**

### **Goal**

Restore and maintain the chemical, physical, and biological integrity of the waters in the Dillon FO to protect beneficial uses. Prevent water quality degradation, and improve watershed function throughout the planning area.

### **Objectives (Desired Future Conditions)**

All water sources provide water quality and quantity sufficient to meet Montana State standards and to protect or restore beneficial uses.

Stream channels display the dimensions, pattern and profile that are representative of site potential to allow floodplain aquifer recharge, moderate stream flows and buffer the effects of flooding.

### **Actions**

- 1 Implement the *Western Montana Standards for Rangeland Health* (see Appendix A) to ensure water quality meets State standards and beneficial uses are protected or restored.
- 2 Comply with the non-degradation provisions of the Montana Water Quality Act.
- 3 Use Best Management Practices (BMPs) (see Appendix B) to prevent non point source water pollution and

apply mitigation measures on a case-by-case basis when implementing projects.

- 4 Obtain permits pertaining to projects affecting water quality, wetlands, and/or streams prior to implementing BLM projects
- 5 Require outside applicants to provide copies of pertinent permits prior to BLM authorizations.
- 6 Continue to coordinate and cooperate with Montana DEQ and communities in the development of Water Quality Restoration Plans (WQRPs) and Source Water Protection Plans.
- 7 Analyze water developments on a case-by-case basis, considering the following:
  - Available water flow. In general, no water developments that remove more than 50% of average summer daily flows from a water source will be constructed unless systems can be designed for return flows back into the drainage within a 1/4 mile of the diversion.
  - Protection of source water riparian and wetland habitat. Where isolated springs are developed, associated riparian habitat will be protected, usually through fencing.
  - Protection of other resource values from direct and indirect impacts from construction and use of the water source. Measures to protect riparian habitats and other resource values including but not limited to sensitive plant species and cultural resources will be implemented based on site-specific needs. Only off-stream water developments and/or armored water gaps will be considered on streams where fencing has excluded the riparian area to prevent impacts to various resources.
  - Location of water tanks in relation to other resource values. Measures to protect resource values in proximity to tank locations will be implemented based on site-specific needs. In general, water tanks will be placed at least 1/4 mile from unfenced stream riparian habitat.

- 8 Implement watershed rehabilitation measures as soon as possible after major catastrophic natural or human-caused fire or flood events.
- 9 Comply with Montana law regarding water rights. Maintain water rights and instream flow reservations subject to Montana water law. Participate in the Montana statewide water adjudication.

**Monitoring**

A sample of ground-disturbing projects with the potential to affect water resources will be evaluated on a periodic basis to determine if best management practices or identified mitigation measures were followed and if they were effective. Results will be reported in the Annual Program Summary and Planning Update. The number of areas/acres that meet the Water Quality standard in the *Western Montana Standards for Rangeland Health* and the total number of areas/acres assessed will also be reported in the Annual Program Summary and Planning Update.

**WILD AND SCENIC RIVERS****Goal**

Identify river segments suitable for inclusion in the National Wild and Scenic River System to protect their outstandingly remarkable values and free-flowing nature.

**Allocation**

Recommend none of the eight (8) river segments determined eligible (106.67 miles) as suitable for inclusion in the National Wild and Scenic Rivers System. See the Final Report on Wild and Scenic River Eligibility Determinations released in July 2002 (USDI-BLM 2002) for additional information on river segments.

**Actions**

- 1 Manage river segments and associated corridors in accordance with the management described throughout this plan rather than under the protective management objectives for eligible or suitable rivers.

**Monitoring**

None. No river segments were proposed as suitable for designation under the Wild and Scenic Rivers Act. The outstandingly remarkable values identified as part of the Wild and Scenic River inventory will be monitored under other plan provisions.

**WILD HORSES AND BURROS****Goal 1**

Promote the wild horse and burro adoption program.

**Actions**

- 1 Support the wild horse and burro program with public education information about adoption opportunities.
- 2 Conduct inspections within the vicinity of the planning area as requested to meet pre-adoption and titling requirements.
- 3 Provide staff to assist with adoptions in the region.

**Monitoring**

Specific monitoring at the field office level will not occur since the planning area has no wild horses or burros. However, assistance provided by Dillon Field Office staff to the Wild Horse and Burro program at adoptions or with inspections will be reported in the Annual Program Summary and Planning Update.

**WILDERNESS****Goal 1**

Manage designated wilderness areas for the preservation of natural conditions and processes, and to provide opportunities for solitude or a primitive and unconfined type of recreation.

**Actions**

- 1 Manage the 6,347 acres of designated wilderness within the Bear Trap Unit of the Lee Metcalf Wilderness (see Map 31) according to direction provided by the BLM Manual H-8560-1, *Management of Designated Wilderness Areas* and the *Final Wilderness Management Plan for Bear Trap Canyon Unit of Lee Metcalf Wilderness* (USDI-BLM 1984a).
- 2 Conduct monitoring to determine use and apply direction found in *Limits of Acceptable Change Management Direction, Bear Trap Canyon Unit* (USDI-BLM 1991c).
- 3 Apply updated versions of the wilderness management plan and the LAC direction as completed.
- 4 If additional areas are designated as wilderness by Congress, prepare a wilderness management plan written specifically for that area and manage accordingly.

**Monitoring**

The Bear Trap Canyon Wilderness will be monitored in accordance with the direction provided in the Wilderness Management Plan (BLM, November, 1984) and the Limits of Acceptable Change Management Direction (BLM, February, 1991) until those documents are superseded by updated direction. Likewise, any new areas that may be designated wilderness by Congress over the life of the plan would be monitored in accordance with guidance developed in their respective wilderness management plans.

**WILDERNESS STUDY AREAS****Goal**

Manage wilderness study areas (WSAs) so as not to impair their suitability for preservation as wilderness until such time as Congress either designates them as wilderness or releases them from further study.

### ***Allocations***

Release the 860 acres of public land within the Tobacco Root Tack-on WSA studied under Section 202 from further consideration as wilderness because it is too small to be considered for wilderness on its own, and no longer complements management of adjacent lands managed by the Beaverhead-Deerlodge National Forest. Manage the area consistent with adjacent lands and in consideration of other land use plan provisions.

Maintain the nine remaining Wilderness Study Areas (see Map 31) and continue to manage these areas according to the *Interim Management Policy for Lands Under Wilderness Review* until such time as Congress either designates them as wilderness or releases them from further consideration as wilderness. These areas include:

- Axolotl Lakes (MT-076-069)
- Bell-Limekiln Canyon (MT-076-026)
- Blacktail Mountains (MT-076-002)
- Centennial Mountains (MT-ISA-002)
- East Fork of Blacktail Deer Creek WSA (MT-076-007)
- Farlin Creek (MT-076-034)
- Henneberry Ridge (MT-076-028)
- Hidden Creek Pasture (MT-076-022)
- Ruby Mountains (MT-076-001)

### ***Actions***

- 1 Allow the use of prescribed fire and associated tools (including mechanical treatments if necessary) in Wilderness Study Areas only where it is determined wilderness values would be enhanced. Use of prescribed fire and associated tools in WSAs would be limited to areas where fire history evidence correlates to historically frequent fire events. Prescribed fire treatments should also move the area toward achieving wildland fire use prescriptions to allow naturally ignited fires to play a more natural role within the WSA. Subsequent fire suppression activities would then be limited to locations outside the WSA except where emergencies threaten life or adjacent private lands. See the *Fire and Forest and Woodland Vegetation* sections for more specific information.
- 2 In the event any or all of the Wilderness Study Areas in the Dillon Field Office are released from further consideration as wilderness, manage the lands within those areas according to the management prescribed in Appendix Q. Where specific management is not addressed, the areas would be managed consistent with surrounding lands as provided for under this land use plan.

### ***Monitoring***

Wilderness Study Areas will be monitored in accordance with direction provided in the *Interim Management Policy for Lands Under Wilderness Review* (BLM Handbook H-

8550-1). The policy requires monitoring of all WSAs, at least once per month during the months the area is accessible by the public. Suitable monitoring methods will include both aerial and ground surveillance. As allowed by the IMP, alternative monitoring schedules may be prepared and implemented if approved by the State Director.

## **WILDLIFE including SPECIAL STATUS BIRDS AND MAMMALS**

### ***Goal 1***

Ensure that native wildlife species are provided habitat of sufficient quantity and quality to enhance biological diversity and sustain their ecological, economic and social values is a goal common to all alternatives. Improve public awareness, understanding and support for resolving issues surrounding wildlife species conservation, management and ecology.

### ***Goal 2***

Ensure the long-term, self-sustaining persistence of special status bird and mammal species in the Dillon Field Office.

### ***Objectives (Desired Future Conditions)***

A full spectrum of biological communities, habitats, and their ecological processes is present.

Populations of native plants and animals are well-distributed across the landscape.

Wetland habitats support a healthy diversity and abundance of dependent wildlife species, with emphasis on special status species needs.

Forested and sagebrush habitat are within the historic range of variability for vegetation composition, canopy and structure, and support a diversity and abundance of dependent wildlife species, especially special status species needs.

Habitat is in suitable condition to allow wildlife movement between large blocks of habitat and seasonal and special habitats on a localized and landscape scale.



### ***Actions—General Wildlife and Special Status Species***

- 1 Implement national wildlife conservation initiatives.
- 2 Provide habitat and forage to support wildlife population goals in current FWP big game management plans.
- 3 Consider the following habitats priority wildlife habitats:
  - all listed and special status species habitats, with grizzly bear and lynx receiving the most emphasis in coniferous forest habitats, and sage grouse receiving the most emphasis in sagebrush steppe habitats
  - coniferous forest and sagebrush habitats that provide important big game winter habitat
  - sagebrush habitats that provide bighorn sheep year-long or seasonal habitats
  - sagebrush habitats that provide sage grouse breeding, early brood rearing, or winter habitat
  - mountain mahogany and sagebrush steppe habitat associations in the Lima Sweetwater Breaks key raptor management area
  - all riparian and wetland habitats
- 4 Consider the following species priority wildlife species:
  - all listed and special status species, with grizzly bear, lynx, and sage grouse receiving the most emphasis
  - bighorn sheep
  - migratory birds listed on the USFWS Region 10 Birds of Conservation Concern list and in Montana Bird Conservation Plan (see Appendix R).
- 5 Evaluate, update, and revise as necessary the following habitat management plans (HMPs) and implement the remaining habitat projects within five years:
  - a. Hidden Pasture Bighorn
  - b. Blacktail
  - c. Red Rock Waterfowl
  - d. Axolotl Lakes
  - e. Wall Creek
- 6 Maintain current exclosures free from livestock grazing, ensure routine maintenance is completed annually on all exclosures before livestock turnout, and monitor to compare differences between areas grazed and ungrazed by livestock.
- 7 Install functional wildlife access ramps on all water tanks on public lands.
- 8 Modify existing fences on public land identified as barriers to wildlife movement to accommodate wildlife passage.
- 9 Follow "wildlife friendly" fence specifications in BLM Manual H1741-1 for new fences.
- 10 Coordinate vegetation treatment projects and management activities that influence wildlife habitat with FWP.
- 11 Use individual species conservation strategies to design habitat strategies that will promote conservation of as many other wildlife species as possible.
- 12 Continue to gather habitat and population data to enhance management effectiveness, with emphasis on migratory birds, amphibians and reptiles, and bats.
- 13 Restore, enhance and maintain habitats for migratory birds, including special status bird species, by implementing cooperative joint venture programs under the North American Bird Conservation Initiative and in consideration of conservation strategies in BLM's Non-game Migratory Bird Habitat Conservation Plan (USDI-BLM 1992) (see Appendix R).
- 14 Minimize disturbance during spring breeding seasons in habitats that sustain bird species identified on the USFWS Region 10 "Birds of Conservation Concern" list.
- 15 Manage ferruginous hawk breeding habitat to protect nesting structures, maintain sagebrush/grassland interspersed, and enhance prey abundance. Evaluate proposed activities within the Lima Foothills and Sweetwater Breaks key raptor management areas (see Map 32) for potential disturbance during the breeding season, and limit activities from March 1 through August 31 within one-half mile of nest sites on a case-by-case basis. Do not authorize surface disturbances within the boundaries of this area that would alter physical structures used by nesting ferruginous hawks (cliffs, rock outcrops, etc.).
- 16 Coordinate when new roads are proposed for construction and/or when changes are proposed regarding travel restrictions on existing roads to determine if concerns with wildlife displacement and/or habitat fragmentation exist. See the *Travel Management* section for additional details.
- 17 Manage the road system to maintain no net change in roads designated open over the long term (with a baseline of 1,342 miles of open road) when wildlife issues (wildlife displacement, habitat fragmentation, road density) or other resource issues are identified in regard to "new roads" (roads that were not identified in the 2002 inventory). However, manage for an open road density not to exceed one mile per square mile if resource issues related to road density are identified, considering both existing and new roads within a project

level cumulative effects area. Seasonal restrictions may be used to mitigate resource concerns by reducing the open road density during periods of concern. Where a greater density of short-term temporary roads is necessary to support specific projects, new project roads will be evaluated at project completion, and if necessary, route designations will be changed to provide the most appropriate access routes in consideration of wildlife or other resource management needs. In areas where resource issues are not identified, do not increase the number of "new roads" by more than one percent of the baseline (1,342 miles) over the life of the plan. To meet these provisions, mileage of new road can be offset by closing existing roads.

- 18 Protect the relevant and important wildlife value (the axolotl habitat) in the Blue Lake ACEC (see Map 6) with the following special management:
  - a. Do not authorize activities contributing to nutrient enrichment or increased water temperature in Blue Lake (e.g., livestock grazing, timber harvest, wheeled vehicle use, etc).
  - b. Place or construct barriers to prevent unauthorized motorized travel into the area
  - c. Require no surface occupancy for mineral leasing
  - d. Develop interpretive materials about the axolotl to inform the public of this special value
- 19 Protect the relevant and important special status species values in the Centennial Mountains ACEC (see Map 7) with the following special management:
  - a. Do not authorize new permanent roads within the ACEC to maintain unfragmented habitat for wildlife migration
  - b. Evaluate proposed activities, including backcountry helicopter operations and winter recreational use, for their potential to affect important and relevant values in the area and do not permit any activities that interfere with protection of those values.
  - c. Allow livestock use as currently authorized. Evaluate any proposed changes in grazing, including time and intensity of use, for impacts on relevant and important values and allow if relevant and important values in the ACEC are maintained or enhanced.
  - d. Do not allow conversion of grazing permits from cattle to sheep to avoid potential conflicts with grizzly bear.

Under standard management, the eastern portion of the ACEC is subject to the *Interim Management Policy for Lands Under Wilderness Review*, unless more restrictive provisions are outlined either as standard provisions in the plan, or as special management.

- 20 Manage wildlife migration/dispersal corridors (depicted on Map 33) that provide connectivity for special status species such as lynx, grizzly bear, and wolf (as well as wildlife in general) to reduce conflicts between listed species and land use authorizations and activities by applying the following actions to all public lands within the identified area:
  - a. Evaluate projects and authorizations proposed on public lands in this area that may increase habitat fragmentation, create physical barriers to movement, or potentially increase mortality.
  - b. Coordinate with others to identify critical barriers and potential passage locations, particularly on Interstate 15 at Monida and between Clark Canyon Dam and Barrett's diversion.
  - c. Implement food storage strategies from the Southwest Montana State Grizzly Management Plan (MT FWP 2002) on BLM lands in the Grizzly Bear use areas outside of the Yellowstone Recovery Zone if grizzly bears are delisted. Until the grizzly bear is delisted, monitor the South Madison campground and undeveloped sites in the East Fork of the Blacktail and the Axolotl Lakes area for food storage problems related to grizzly bear use and the potential need for bear proof trash containers. Post major public land trailheads and access points in these areas and in the Centennial Mountains to advise recreationists about proper food storage to avoid back country conflict.
  - d. Amend grazing permits in these areas to state that depredation losses are possible.
  - e. Authorize no new sheep permits or conversion of cattle permits to sheep within wildlife dispersal/migration corridors (permits could continue to be transferred). This would not preclude the use of sheep as a management tool on a case-by-case basis (for example, grazing sheep to help control weeds).
- 21 Manage special status species habitats and populations using multi-scale assessments to identify current conditions, risks and opportunities.
- 22 Consider potential impacts to special status species, including bats, amphibians and reptiles on a case-by-case basis during project and activity planning.
- 23 Ensure that habitat is provided for special status species, and that proposed actions do not jeopardize the continued existence of a threatened or endangered species, or cause its habitat to be adversely modified or destroyed.

- 24 Consider conservation strategies for sensitive species when issuing land use authorizations.
- 25 Manage special status species habitat to minimize disturbance and displacement due to authorizations and activities, particularly during breeding seasons.
- 26 Implement habitat improvement or restoration projects to enhance the distribution and availability of special status species. Prioritize habitat projects where fragmentation and risks to the security of special status species is highest.
- 27 Enhance, restore and maintain habitat conditions and availability for special status species and prevent all avoidable loss of habitat.
- 28 Cooperate in implementation and monitoring of recovery plans, State of Montana management plans, and conservation strategies for all listed, recently delisted, and candidate species.
- 29 Implement management plans prepared for species not yet delisted in coordination with the State of Montana and other appropriate agencies once the species is delisted by the USFWS.
- 30 Use the format developed in conjunction with the Beaverhead-Deerlodge National Forest (Appendix F) to complete biological evaluations for projects to determine effects on special status plant and animal species and bird species included in the USFWS Region 10 list of "Birds of Conservation Concern" (Appendix R).
- 31 Treat sensitive species as candidate species for project impact analysis.
- 32 Consult with the US Fish and Wildlife Service when impacts are anticipated to threatened or endangered species or designated habitat.
  - Use the interagency analysis screens for threatened and endangered species to facilitate consistent consultation and streamline consultation on actions that have insignificant or discountable effects (see Appendix S).
  - Use the analysis screens for bald eagle, gray wolf, and grizzly bear in Appendices S, T, and U in conjunction with the joint BLM-FS evaluation form to evaluate proposed actions and projects to determine effects and the need for additional consultation with the US Fish and Wildlife Service.
  - Use the analysis screen for lynx and measures in the Lynx Conservation and Assessment Strategy (LCAS) (see Appendix W) in conjunction with the joint BLM-FS evaluation form to evaluate proposed actions and projects to determine effects and the need for additional consultation with the US Fish and Wildlife Service.
- 33 Adjust lynx analysis units (LAUs) as lynx habitat information is refined or conditions change and drop those with insufficient potential habitat to support a home range of a breeding female lynx.
- 34 Implement the following non-discretionary terms and conditions to ensure that actions conducted under the plan do not result in unexpected consequences that affect more grizzly bears or impart additional effects to grizzly bears than anticipated in the USFWS biological opinion of October 29, 2004 (incidental take of no more than two bears over the life of the plan as a result of habituation and/or food conditioning of grizzly bears or conflicts with livestock, an unquantifiable level of take from displacement effects of road densities and activity in project areas, and no more than one bear over the life of the plan as a result of conflicts with sheep used for BLM weed control projects):
  - If more than ten miles of road construction is planned or completed annually, BLM Dillon Field Office will consult with the USFWS.
  - Temporary roads will be closed and reclaimed within two years following the end of road use or project completion.
  - The BLM will maintain an up-to-date record of grizzly bear management actions that take place on BLM lands or as a result of activities authorized by BLM Dillon Field Office.
  - If an incident of depredation or use of improperly stored food items results in removal of a grizzly bear, BLM shall follow the Interagency Grizzly Bear Committee (IGBC) guidelines in reporting the incident to the USFWS.
  - BLM shall report any depredation or food storage incidences to the USFWS Montana Ecological Services Sub-office in Billings, or Montana Ecological Services Field Office in Helena in addition to the reporting required in the IGBC guidelines.
  - To monitor changes in road densities and potential effects on grizzly bear or their habitat, BLM will provide an annual report to the USFWS documenting:
    - the number of miles of new road constructed
    - the number of miles of road closed to public use and reclaimed
    - the number of miles of temporary road on the landscape, and length of time since construction of the temporary road
    - how open road densities may have changed relative to target densities of one mile per square mile within the analysis area for projects. (USFWS recommends the use of 6<sup>th</sup>

code hydrologic units for an unbiased and consistent analysis of open road density, using the unit containing the project and the adjoining 3-6 units with similar habitat).

- 35 Require the following measures for any projects located in areas where grizzly bear use is known or likely to occur (see Map 34) where domestic sheep are used to control noxious weeds:
- Domestic sheep grazing to control noxious weeds will not be used where previous livestock depredations have occurred from grizzly bears or wolves.
  - Domestic sheep will be removed from a project area if depredation or encounters occur from grizzly bears or wolves.
  - Any contracts or agreements to use domestic sheep grazing to control noxious weeds will specify that no control actions against grizzly bears or wolves will be requested by the contractor if depredations or encounters occur as part of the weed grazing action. Any encounters with wolves or grizzly bears will be reported to Montana FWP and the USDA Wildlife Services.
  - Domestic sheep will be herded, and will be attended by guard dogs at all times.
  - Temporary, predator-proof electric fencing will be used to protect night bedding areas where potential for predation by wolves and grizzly bears exists.
- 36 Implement the following conservation actions recommended by USFWS as discretionary actions to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information:
- Participate in ongoing interagency efforts to identify, map, and manage linkage habitats essential to grizzly bear movement between ecosystems. (Contact the USFWS grizzly bear recovery coordinator office at (406) 243-4903 for more information).
  - Continue to manage road access on BLM lands to achieve lower road densities where possible.
  - Manage garbage food and livestock feed storage to prevent access to bears to benefit grizzly bears as well as black bears and other carnivores. Reduction in human/carnivore interactions will also increase public safety.
  - Where grizzly bear use is known or likely to occur and where practicable, delay disturbance activities during the spring in spring habitats to minimize displacement of grizzlies.
  - Include security cover needs for grizzly bears in timber and vegetation management activity plans to increase the utility of habitat for grizzly bears across the Dillon planning area. Specifically, adjust the size and shape of cutting and harvest units to reduce the distance to cover, adjust edges, and

leave patches of trees and understory within cutting units to reduce line-of-sight distances.

- 37 Reinitiate consultation with USFWS if:
- The amount or extent of incidental take is exceeded. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending re-initiation.
  - New information reveals an agency action may affect listed species or critical habitat in a manner or to an extent not considered in this opinion
  - An agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the USFWS Biological Opinion on the Dillon RMP
  - A new species is listed or critical habitat designated that may be affected
- 38 Coordinate with APHIS regarding depredation management on public land in accordance with the APHIS-BLM Master Memorandum of Understanding and the 1997 Predator Damage Management Plan (USDA-APHIS/ADC 1997).

### ***Actions—Coniferous Forest Wildlife Habitats***

- 39 Minimize big game displacement by limiting sustained vegetation treatment activities of more than one week in duration (including, but not limited to, broad-scale burning and mechanical treatments) to occur in no more than two adjacent 6<sup>th</sup> order hydrologic units at a time. These adjoining units would be maintained as disturbance-free as possible during operations.
- 40 Minimize impacts to migratory bird populations during the breeding season when considering vegetative treatments (such as fire, fuels, habitat improvement, etc.) by using measures such as the size of the treatment area, timing, spacing of treatments, etc.
- 41 Enhance open-forest habitat for dependent species by maximizing Douglas fir treatment unit size within the limits of topography and stand size. Assign priority to areas within historic bighorn sheep habitat where reduced forest canopy could enhance bighorn reestablishment or expansion, including Barton Gulch, the south Tobacco Root Mountains, and the south Ruby Mountains.

### ***Actions—Sagebrush Steppe Wildlife Habitats***

- 42 Use the National and Montana sage grouse conservation strategies (see Appendix X) as the basis to address habitat management in the watershed planning process and in project level analysis.

- 43 Manage sagebrush habitats so that mid-scale level shrub cover includes a mix of height classes with herbaceous understory adequate for meeting seasonal habitat requirements for sage grouse and other wildlife species that use sagebrush habitat including wintering antelope and mule deer.
- In habitats with predominately mountain big sagebrush, manage sites with the potential to support sagebrush in a manner that maintains > 70 percent of those areas in canopy closure of 5 to 25 percent.
  - In habitats that include predominately Wyoming big sagebrush, manage sites with ecological potential to maintain sagebrush over at least 60 percent of those areas in a canopy closure of 5 to 25 percent.
  - Maintain an herbaceous understory emphasizing multiple species of native forbs and grasses, recognizing that herbaceous productivity decreases at >10-15 percent canopy cover.
  - Emphasize restoration and rehabilitation of sagebrush in areas that are capable of supporting sagebrush and contribute to the distribution and connectivity of patches.
- 44 When making project decisions located in sage grouse habitats, objectives for sage grouse habitats and relevant information about sage grouse seasonal habitat will be considered when determining the desired resource condition. If specific issues regarding sage grouse are identified, applicable conservation actions or guidelines will be reviewed by interdisciplinary teams and considered in the decision-making process. None of the conservation actions or guidelines in the Management Plan and Conservation Strategies for Sage Grouse in Montana will be construed as mandatory or standards.
- 45 Allow no net loss of overall distribution and quality of sagebrush habitats, recognizing that short-term, localized losses may occur through management activities.
- 46 Focus wildfire suppression efforts on protecting large dense stands of sagebrush that are isolated from other dense stands.
- 47 Emphasize protection of dense sagebrush patches within occupied pygmy rabbit habitat. Do not treat the densest patches of sagebrush within sagebrush communities occupied by pygmy rabbits.
- 48 Do not authorize activities contributing to the loss of Basin big sagebrush and Wyoming big sagebrush "stringer" habitat in special status species habitats through mechanical damage or other means.
- 49 Minimize impacts to migratory bird populations during the breeding season when considering vegetative treatments (such as fire, fuels, habitat improvement, etc.) by using measures such as the size of the treatment area, timing, spacing of treatments, etc.
- 50 Enhance bighorn sheep habitat suitability in currently occupied habitat (see Map 35) by minimizing or avoiding competing uses (competition for forage and water) and disturbance factors (seasonal disturbance on lambing habitat).
- 51 Maintain cattle as the primary class of livestock authorized to graze on mountain mahogany habitat. Sheep grazing on mountain mahogany habitat will be mitigated through site-specific management treatments, changed to cattle use, or eliminated where monitoring data indicates it is necessary.

### ***Actions—Riparian and Wetland Wildlife Habitats***

- 52 Consider wildlife needs on a case-by-case basis for any projects proposed in riparian/wetland habitat.
- 53 Implement wetland-based initiatives for waterfowl and wetland dependant species.
- 54 Coordinate with FWP to manage beaver where site-specific assessments have identified concerns with beaver presence or absence in riparian-wetland habitats for wildlife.
- 55 Allow no net loss of overall distribution and quality of wetland habitats, recognizing that short-term, localized losses may occur through management activities.
- 56 Manage the density and height of emergent wetland vegetation (cattails, rushes, etc.) to provide residual nesting cover and concealment for trumpeter swans and other waterfowl within the wetland and waterfowl production areas in the Centennial Valley (see Map 36).
- 57 Update and revise the Red Rock Waterfowl Habitat Management Plan to emphasize wetland habitat improvement to benefit wetland-dependent species as well as maximize opportunities to reestablish and maintain trumpeter swan occupancy. Pursue cooperative management on co-owned public/private wetlands to enhance habitat capabilities and water availability.

### ***Monitoring***

Support and assist FWP in monitoring wildlife habitat and population goals through the Montana Comprehensive Fish and Wildlife Conservation Strategy. Assess changes in sagebrush, coniferous forest and riparian/wetland habitat distribution, canopy, composition and condition on a landscape and watershed basis during watershed evaluations (see Map 20 for watershed areas). Where vegetation treatments have

been implemented, or natural events have occurred, monitor changes in species composition and structure compared to pre-treatment conditions.

Continue to monitor known populations of special status species, in conjunction with Federal, state and private agencies or organizations (bald eagle, peregrine falcon, sage grouse, pygmy rabbit, trumpeter swan, raptors). Monitoring may use intensive research projects or periodic population/habitat inventories to determine habitat extent or population status. This monitoring may be accomplished through contracts and/or with the aid of partnership funding sources in support of individual species conservation strategies. Participate in Intermountain Joint Venture efforts for all-bird monitoring at mid- and fine-scale.

Annually document and report to USFWS the amount and extent of surface-disturbing activities that result in habitat fragmentation in wildlife corridors and linkage areas, focusing on road density changes and potential effects on griz-

zly bear. The report will include:

- a. the number of miles of new road constructed
- b. the number of miles of road closed to public use and reclaimed
- c. the number of miles of temporary road on the landscape, and length of time since construction of the temporary road
- d. how open road densities may have changed relative to target densities of one mile per square mile within the analysis area for projects. (USFWS recommends the use of 6<sup>th</sup> code hydrologic units for an unbiased and consistent analysis of open road density, using the unit containing the project and the adjoining 3-6 units with similar habitat).

This information will be included in the Annual Program Summary and Planning Update, along with a summary of areas monitored for changes in species composition and structure, and the number/type of baseline inventories completed.



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## GLOSSARY

### -A-

**Accelerated Erosion:** Soil loss above natural levels resulting directly from human activities. Because of the slow rate of soil formation, accelerated erosion can lead to a permanent reduction in plant productivity.

**Active Preference:** That portion of the total grazing preference for which grazing use may be authorized.

**Activity Plan:** Site-specific plan which precedes actual development. This is the most detailed level of BLM planning, and is also referred to as project level or implementation level planning.

**Actual Use:** The amount of animal unit months consumed by livestock based on the numbers of livestock and grazing dates submitted by the livestock operator and confirmed by periodic field checks by the BLM.

**Aduit:** Horizontal, or nearly horizontal, passage from the surface by which a mine is worked or dewatered.

**Administrative Unit:** Field Office, Resource Area, District or State.

**Air Quality:** Refers to standards for various classes of land as designated by the Clean Air Act of 1978.

**Allotment:** An area of land where one or more livestock operators graze their livestock. Allotments generally consist of BLM lands but may also include other federally managed, state owned, and private lands. An allotment may include one or more separate pastures. Livestock numbers and periods of use are specified for each allotment.

**Allotment Categorization:** Grazing allotments and rangeland areas used for livestock grazing are assigned to an allotment category during resource management planning. Allotment categorization is used to establish priorities for distributing available funds and personnel during plan implementation to achieve cost-effective improvement of rangeland resources. Categorization is also used to organize allotments into similar groups for purposes of developing multiple use prescriptions, analyzing site-specific and cumulative impacts, and determining trade-offs.

**Allotment Management Plan:** A written program of livestock grazing management, including supportive measures if required, designed to attain specific management goals in a grazing allotment.

**Alluvial Fan:** A low, outspread, relatively flat to gently sloping mass of loose rock material deposited by a stream where it flows from a narrow mountain valley onto a plain or broad valley.

**Alluvium:** Any sediment deposited by flowing water, as in a river bed, floodplain, or delta.

**Amendment:** The process for considering or making changes in the terms, conditions, and decisions of approved Resource Management Plans or Management Framework Plans using the prescribed provisions for resource management planning appropriate to the proposed action or circumstances. Usually only one or two issues are considered that involve only a portion of the planning area.

**Analysis of the Management Situation:** A comprehensive documentation of the present conditions of the resources, current management guidance, and opportunities for change.

**Animal Unit Month:** A standardized measurement of the amount of forage necessary for the sustenance of one cow unit or its equivalent for 1 month. Approximately 800 pounds of forage.

**Appeal:** Application for review by a higher court.

**Aquatic:** Living or growing in or on the water.

**Aquifer:** A water-bearing bed or layer of permeable rock, sand, or gravel capable of yielding large amounts of water.

**Archaeological resource/remains:** A term with legal definition and application, meaning any material remains of human life or activities that are at least 100 years of age, and that are of archaeological interest.

**Area of Critical Environmental Concern:** Areas within the public lands where special management attention is required to: (1) protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or (2) protect life and safety from natural hazards.

**Arid:** A condition of a region where precipitation is insufficient to support any but drought-adapted vegetation.

**Armoring:** Placement of protective material for the primary purpose of reducing sediment into streams or other water bodies.

**Aspect:** (1) the visual first impression of vegetation at a particular time or seen from a specific point. (2) The predominant direction of the slope of the land.

**Assessment:** The act of evaluating and interpreting data and information for a defined purpose.

**Authorized Officer:** The Federal employee who has the delegated authority to make a specific decision.

**Authorized Use:** Uses of public land that may be authorized include agriculture development, residential use (under certain conditions), business, industrial, and commercial uses, advertising; research projects, State National Guard maneuvers, and motion picture filming. Recreational concessions are considered business uses and may be authorized by lease. Timber harvest, livestock grazing, mineral extraction and special recreation events, among other uses, are authorized under other regulations and not under Section 302 of FLPMA.

**Avoidance Areas:** Areas with sensitive resource values where rights-of-way would be strongly discouraged. Authorizations made in avoidance areas would have to be compatible with the purpose for which the area was designated and not be otherwise feasible on lands outside the avoidance area.

-B-

**Back Country Byways:** Vehicle routes that traverse scenic corridors utilizing secondary or back country road systems. National back country byways are designated by the type of road and vehicle needed to travel the byway.

**Backfill:** Material used to replace soil and earth removed during mining.

**Backfilling:** The replacement of soil and earth removed during mining.

**Basin:** A depressed area having no surface outlet (topographic basin); a physiographic feature or subsurface structure that is capable of collecting, storing, or discharging water by reason of its shape and the characteristics of its confining material (water); a depression in the earth's surface, the lowest part often filled by a lake or pond (lake basin); a part of a river or canal widened (drainage, river, stream basin).

**Best Management Practices:** A suite of techniques that guide, or may be applied to, management actions to aid in achieving desired outcomes. Best management practices are often developed in conjunction with land use plans, but they are not considered a land use plan decision unless the land use plan specifies that they are mandatory. They may be updated or modified without a plan amendment if they are not mandatory.

**Big Game:** Large species of wildlife that are hunted, such as elk, deer, bighorn sheep, and pronghorn antelope.

**Biodiversity:** The diversity of living organisms considered at all levels of organization including genetics, species, and higher taxonomic levels, and the variety of habitats and ecosystems, as well as the processes occurring therein.

**Biological Assessment:** The gathering and evaluation of information on proposed endangered and threatened species and critical habitat and proposed critical habitat. Required when a management action potentially conflicts with endangered or threatened species, the biological assessment is the way federal agencies enter into formal consultation with the Fish and Wildlife Service and describe a proposed action and the consequences to the species the action would affect.

**Biomass:** Vegetative material leftover from stand treatments. This term usually refers to such material that can be gathered and transported to cogeneration plants, and there utilized for production of electricity.

**Board feet:** A unit of solid wood one foot square and one inch thick.

**Bole:** The main stem(s) of a timber species tree.

**Bond, or Corporate Guarantee:** The use of corporate assets as part or all of the financial assurance for reclamation.

**Browse:** To browse (verb) is to graze a plant; also, browse (noun) is the tender shoots, twigs and leaves of trees and shrubs often used as food by livestock and wildlife.

**Buffer zone (strip):** A protective area adjacent to an area of concern requiring special attention or protection. In contrast to riparian zones which are ecological units, buffer strips can be designed to meet varying management concerns.

**Bunchgrass:** Individual grasses that have the characteristic growth habit of forming a "bunch" as opposed to having stolens or rhizomes or single annual habit.

-C-

**Cambrian:** The oldest of the periods of the Paleozoic Era; also the system of strata deposited during that period.

**Candidate species:** Any species included in the Federal Register notice of review that are being considered for listing as threatened or endangered by the U.S. Fish and Wildlife Service.

**Canopy:** The uppermost layer consisting of the crowns of trees or shrubs in a forest or woodland.

**Carrying capacity:** The maximum stocking rate possible without damaging vegetation or related resources.

**Casual Use:** Activities that only negligibly disturb federal lands and resources. For mining activities, casual use generally includes the collecting of geochemical, rock, soil, or mineral specimens using hand tools, hand panning, and nonmotorized sluicing. It also generally includes use of metal detectors, gold spears, and other battery-operated devices for sensing the presence of minerals, and hand and battery-operated drywashers. Casual use does not include use of mechanized earth-moving equipment, truck-mounted drilling equipment, suction dredges, motorized vehicles in areas designated as closed to off-road vehicles, chemicals, or explosives. It also does not include occupancy or operations where the cumulative effects of the activities result in more than negligible disturbance.

**Categorical Exclusion:** A category of actions (identified in agency guidance) that do not individually or cumulatively have a significant effect on the human environment, and for which neither an environmental assessment nor an Environmental Impact Statement is required.

**Cave Resource:** Any naturally occurring void, cavity, recess, or system of interconnected passages beneath the surface of the earth or within a cliff or ledge, including any cave resource therein, that is large enough to permit a person to enter, whether the entrance is excavated or naturally formed. Also included is any natural pit or sinkhole.

**Cenozoic:** The most recent era of geologic history (65 million years ago until the present) during which the world's modern landforms, animals, and plants came into being.

**Channel:** An open conduit either naturally or artificially created which periodically or continuously contains moving water or forms a connecting link between two bodies of water.

**Clean Air Act:** Federal legislation governing air pollution.

**Climax:** The culminating stage in plant succession for a given site where vegetation has reached a highly stable condition.

**Climax Vegetation:** The final vegetation community and highest ecological development of a plant community that emerges after a series of successive vegetational stages. The climax community perpetuates itself indefinitely unless disturbed by outside forces.

**Closed:** Generally denotes that an area is not available for a particular use or uses; refer to specific definitions found in law, regulations, or policy guidance for application to individual programs.

**Closed Area or Trail:** Designated areas and trails where the use of off-road vehicles are permanently or temporarily prohibited. The use of off-road vehicles in closed areas may be

allowed only with the approval of the authorized officer.

**Closed Road:** A road or segment which is restricted from certain types of use during certain seasons of the year. The prohibited use and the time period of closure is specified.

**Coal:** A readily combustible rock containing more than 50 percent weight and more than 70 percent by volume of carbonaceous material including inherent moisture, formed from compaction and induration of variously altered plant remains similar to those in peat. Differences in the kinds of plant materials (type), in degree of metamorphism (rank), and in the range of impurity (grade) are characteristic of coal and are used in classification.

**Code of Federal Regulations (CFR):** The official, legal tabulation or regulations directing federal government activities.

**Collaboration:** A cooperative process in which interested parties, often with widely varied interests, work together to seek solutions with broad support for managing public and other lands. This may or may not involve an agency as a cooperating agency.

**Colluvium:** A general term applied to loose and incoherent deposits, usually at the foot of a slope or cliff and brought there chiefly by gravity. Talus and cliff debris are included in such deposits.

**Commercial Forest Land:** Forest land which is producing, or has a site capable of producing, at least 20 cubic feet/acre/year of a commercial tree species.

**Common Variety Minerals:** Stone, gravel, pumice, pumicite, and cinders that, though possibly having value for trade, manufacture, the sciences, or the mechanical or ornamental arts, do not have a distinct, special value for such use beyond normal uses. On the public lands such minerals are considered saleable and are disposed of by sales or by special permits to local governments.

**Community:** An assemblage of plant and animal populations in a common spatial arrangement.

**Composition (of forest vegetation):** The proportion of each tree species in a stand, expressed as a percentage of the total number, basal area, or volume of all tree species in the stand.

**Conformance:** That a proposed action shall be specifically provided for in the land use plan or, if not specifically mentioned, shall be clearly consistent with the goals, objectives, or standards of the approved land use plan.

**Conifer:** A tree of the order Coniferae with cones and needle-shaped or scalelike leaves.

**Coniferous:** Pertaining to conifers, which bear woody cones containing naked seeds.

**Conservation Agreement:** A formal signed agreement between the U.S. Fish and Wildlife Service or National Marine Fisheries Service and other parties that implements specific actions, activities, or programs designed to eliminate or reduce threats or otherwise improve the status of a species. CA's can be developed at a State, regional, or national level and generally include multiple agencies at both the State and Federal level, as well as tribes. Depending on the types of commitments the BLM makes in a CA and the level of signatory authority, plan revisions or amendments may be required prior to signing the CA, or subsequently in order to implement the CA.

**Conservation Strategy:** A strategy outlining current activities or threats that are contributing to the decline of a species, along with the actions or strategies needed to reverse or eliminate such a decline or threats. Conservation strategies are generally developed for species of plants and animals that are designated as BLM Sensitive species or that have been determined by the Fish and Wildlife Service or National Marine Fisheries Service to be Federal candidates under the Endangered Species Act.

**Consistency:** The proposed land use plan does not conflict with officially approved plans, programs, and policies of tribes, other Federal agencies, and State, and local governments to the extent practical within Federal law, regulation, and policy.

**Contiguous:** lands or legal subdivisions having a common boundary; lands having only a common corner are not contiguous.

**Cooperating Agency:** Assists the lead Federal agency in developing an Environmental Analysis or Environmental Impact Statement. The Council on Environmental Quality regulations implementing NEPA define a cooperating agency as any agency that has jurisdiction by law or special expertise for proposals covered by NEPA. Any tribe or Federal, State, or local government jurisdiction with such qualifications may become a cooperating agency by agreement with the lead agency.

**Corridor:** A wide strip of land within which a proposed linear facility could be located.

**Council on Environmental Quality:**

**Cover:** Any form of environmental protection that helps an animal stay alive (mainly shelter from weather and concealment from predators).

**Cover Type:** The present vegetation composition of an area, described by the dominant plant species.

**Critical Habitat:** An area occupied by a threatened or endangered species "on which are found those physical and biological features (1) essential to the conservation of the species, and (2) which may require special management considerations or protection".

**Cultural resource/cultural property:** a definite location of human activity, occupation, or use identifiable through field inventory (survey), historical documentation, or oral evidence. The term includes archaeological, historic, or architectural sites, structures, or places with important public and scientific uses, and may include definite locations (sites or places) or traditional cultural or religious importance to specified social and/or cultural groups. Cultural resources are concrete, material places and things that are located, classified, ranked, and managed through the system of identifying, protecting, and utilizing for public benefit.

**Cultural resource inventory classes:**

- **Class I – Existing data inventory:** a study of published and unpublished documents, records, files, registers, and other sources, resulting in analysis and synthesis of all reasonably available data. Class I inventories encompass prehistoric, historic, and ethnological/sociological elements, and are in large part chronicles of past land uses. They may have major relevance to current land use decisions.
- **Class II – Sampling field inventory:** a statistically based sample survey designed to help characterize the probable density, diversity, and distribution of archaeological properties in a large area by interpreting the results of surveying limited and discontinuous portions of the target area.
- **Class III – Intensive field inventory:** a continuous, intensive survey of an entire target area, aimed at locating and recording all archaeological properties that have surface indications, by walking close-interval parallel transects (generally at 30 m intervals) until the area has been thoroughly examined.

**Cumulative Impact:** The impact on the environment that results from the incremental impact of the action when added to other past, present, or reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

**Cunits:** A unit of volume equivalent to 100 cubic feet of solid wood.

-D-

**Deciduous:** Pertaining to plants that shed all their leaves every year in a certain season.

**Denning Habitat:** Habitat used during parturition and rearing of young until they are mobile. The common component appears to be large amounts of coarse woody debris, either down logs or root wads. Coarse woody debris provides escape and thermal cover for kittens. Denning habitat may be found either in older mature forest of conifer or mixed conifer/deciduous types, or in regenerating stands (>20 years since disturbance). Denning habitat must be located within daily travel distance of foraging habitat (typical maximum daily distance for females is 3-6 miles).

**Designated Roads and Trails:** Specific roads and trails where some type of motorized vehicle use is allowed either seasonally or year-long.

**Development Well:** A well drilled within the known or proven productive area of an oil field with the expectation of producing oil or gas from the producing reservoir.

**Discharge (Water):** The rate of flow or volume of water flowing in a stream at a given place or within a given period of time.

**Dispersed or Extensive Recreation:** Recreation activities of an unstructured type which are not confined to specific locations such as recreation sites. Example of these activities may be hunting, fishing, off-road vehicle use, hiking, and sightseeing.

**Disturbance:** Events that alter the structure, composition, or function of terrestrial or aquatic habitats. Natural disturbances include drought, floods, wind, fires, wildlife grazing, and insects and pathogens. Human-caused disturbances include actions such as timber harvest, fire, livestock grazing, road construction, and the introduction of exotic species.

**Distribution Line:** An electric power line operating at a voltage of less than 69 kilovolts.

**Diversity:** The relative abundance of wildlife species, plant species, communities, habitats, or habitat features per unit of area.

**Drainage:** The removal of excess water from land by surface or subsurface flow.

**Drawdown, Ground Water:** A lowering of the ground water surface caused by pumping, measured as the difference between the original ground water level and the level after a period of pumping.

**Drilling:** The operation of boring a hole in the earth, usually for the purpose of finding and removing subsurface formation fluids such as oil and gas.

**Dry Hole:** Any well incapable of producing oil or gas in commercial quantities. A dry hole may produce water, gas, or even oil, but not enough to justify production.

-E-

**Easement:** A right afforded a person or agency to make limited use of another's real property for access or other purposes.

**Ecosystem:** A complete, interacting system of living organisms and the land and water that make up their environment; the home places of all living things, including humans.

**Emergent Vegetation:** Aquatic plant species that are rooted in wetlands but extend above the water's surface.

**Endangered Species:** A plant or animal species whose prospects for survival and reproduction are in immediate jeopardy, as designated by the Secretary of the Interior, and as is further defined by the Endangered Species Act.

**Entry:** An application to acquire title to public lands.

**Environmental Assessment:** A concise public document that analyzes the environmental impacts of a proposed federal action and provides sufficient evidence to determine the level of significance of the impacts.

**Environmental Impact Statement:** A detailed written statement required by the National Environmental Policy Act when an agency proposes a major federal action significantly affecting the quality of the human environment.

**Erosion:** The wearing away of the land surface by running water, wind, ice, or other geological agents.

**Exception (oil and gas):** A one-time exemption to a lease stipulation. Exceptions are determined on a case-by-case basis.

**Exclusion Areas:** Areas with sensitive resource values where rights-of-way would be prohibited.

**Exploration:** The work of investigating a mineral deposit to determine by geological surveys, geophysical surveys, geochemical surveys, boreholes, pits, and underground workings if it is feasible to mine.

**Extensive Recreation Management Area:** Areas where significant recreation opportunities and problems are limited and explicit recreation management is not required. Minimal management actions related to the Bureau's stewardship responsibilities are adequate in these areas.

## -F-

**Fan:** An accumulation of debris brought down by a stream descending through a steep ravine and debouching in the plain beneath, where the detrital material spreads out in the shape of a fan, forming a section of a very low cone.

**Federal Land Policy and Management Act of 1976:** Public Law 94-579. October 21, 1976, often referred to as the BLM's "Organic Act," which provides the majority of the BLM's legislated authority, direction, policy, and basic management guidance.

**Federal Register:** A daily publication that reports Presidential and Federal Agency documents.

**Fire-dependent ecosystems:** Ecosystems in which recurring disturbances by fire are essential to ecosystem function.

**Fire Management Plan:** A strategic plan that defines a program to manage wildland and prescribed fires and documents the fire management program in the approved land use plan; the plan is supplemented by operational procedures such as preparedness plans, preplanned dispatch plans, prescribed fire plans, and prevention plans.

**Fire Preparedness:** Activities that lead to a safe, efficient, and cost-effective fire management program in support of land and resource management objectives through appropriate planning and coordination.

**Fire Regimes:** periodicity and pattern of naturally occurring fires in a particular area or vegetative type, described in terms of frequency, biological severity, and areal extent (Tande 1980).

**Fishery:** Habitat that supports the propagation and maintenance of fish.

**Flood Plain:** The relatively flat area or lowlands adjoining a body of standing or flowing water which has been or might be covered by floodwater.

**Fluvial:** Pertaining to streams or produced by stream action.

**Forage:** All browse and herbaceous foods available to grazing animals, which may be grazed or harvested for feeding.

**Forb:** A herbaceous plant that is not a grass, sedge, or rush.

**Forest Health treatments:** Treatments that restore forest ecosystems to a condition that sustains their complexity while providing for human needs.

**Forest Land:** Land that is now, or has the potential of being, at least 10 percent stocked by forest trees (based on crown

closure) or 16.7 percent stocked (based on tree stocking).

**Formation:** A body of rock identified by lithic characteristics and stratigraphic position; it is prevailingly, but not necessarily tabular, and is mappable at the earth's surface or traceable in the subsurface.

**Fossil:** Mineralized or petrified form from a past geologic age, especially from previously living things.

**Fragile Soil:** A soil that is especially vulnerable to erosion or deterioration due to its physical characteristics and/or location. Disturbance to the surface or the vegetative cover can initiate a rapid cycle of loss and destruction of soil material, structure, and ability to sustain a biotic community.

**Free-flowing River:** Existing or flowing in a natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway.

**Fuels:**

**Fuel loading:** The weight of fuels in a given area, usually expressed in tons per acre, pounds per acre, or kilograms per square meter.

## -G-

**Geographic Information System (GIS):** A computer system capable of storing, analyzing, and displaying data and describing places on the earth's surface.

**Geophysical Exploration:** The use of geophysical instruments and methods to determine subsurface conditions by analyzing such properties as specific gravity, electrical conductivity, or magnetic susceptibility.

**Goal:** A broad statement of a desired outcome. Goals are usually not quantifiable and may not have established time frames for achievement.

**Grazing System:** The manipulation of livestock grazing to accomplish a desired result.

**Groundwater:** Water contained in pore spaces of consolidated and unconsolidated surface material.

**Guidelines:** Actions or management practices that may be used to achieve desired outcomes, sometimes expressed as best management practices. Guidelines may be identified during the land use planning process, but they are not considered a land use plan decision unless the plan specifies that they are mandatory.

## -H-

**Habitat:** A specific set of physical conditions that surround a species, group of species, or a large community. In wild-

life management, the major constituents of habitat are considered to be food, water, cover, and living space. The complete suite of biotic and abiotic components of the environment where an animal lives.

**Heap:** A large, engineered pile of ore over which chemical agents such as cyanide are sprinkled in extracting metals by heap leaching.

**Heap Leaching:** A low-cost technique for extracting metals from ore by percolating leaching solutions through heaps of ore placed on impervious pads. This method is generally used on low-grade ores.

**Heavy Metal:** Any of the metals that react readily with dithizone, including zinc, copper, cobalt, lead, bismuth, gold, cadmium, iron, manganese, nickel, tantalum, tellurium, platinum, and silver.

**Herbaceous:** Pertaining to or characteristic of an herb (fleshy-stem plant) as distinguished from the woody tissue of shrubs and trees.

**Highwall:** The unexcavated face of exposed overburden and ore in an open pit mine.

**Historic:** Period wherein nonnative cultural activities took place, based primarily upon European roots, having no origin in the traditional Native American culture(s).

**Historic property or historic resource:** “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register. The term includes, for purposes of these regulations, artifacts, records, and remains that are related to and located within such properties. The term ‘eligible for inclusion in the National Register’ includes both properties formally determined as such by the Secretary of the Interior and all other properties that meet National Register listing criteria” {quoted from 36 CFR 900.2(e)}.

**Home Range:** The area in which an animal travels in the scope of natural activities.

**Horizon (soil):** A layer of soil or soil material roughly parallel to the land surface and differing from adjoining genetically related layers in physical, chemical, and biological properties or characteristics, such as color, structure, and texture.

**Hummock:** A low, rounded hill, knoll, hillock; a tract of wooded land higher than a nearby swamp or marsh.

**Hydrologic Condition:** The current state of the processes controlling the yield, timing, and quality of water in a watershed. Each physical and biologic process that regulates or influences streamflow and ground-water character has a

range of variability associated with the rate or magnitude of energy and mass exchange. At any point in time, each of these processes can be defined by their current rate or magnitude relative to the range of variability associated with each process. Integration of all processes at one time represents hydrologic condition.

**Hydrologic Unit:** A level of a hierarchical system to describe geographic areas. Hydrologic units are used for the collection and organization of hydrologic data.

**Hydrophytic:** Water-loving; ability to grow in water or saturated soils.

## -I-

**Igneous Rock:** Rock, such as granite and basalt, that has solidified from a molten or partially molten state.

**Impact:** A modification of the existing environment caused by an action (such as construction or operation of facilities).

**Impacts (or Effects):** Environmental consequences (the scientific and analytical basis for comparison of alternatives) as a result of a proposed action. Effects may be either direct, which are caused by the action and occur at the same time and place, or indirect, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable, or cumulative.

**Implementation Decisions:** Decisions that take action to implement land use plan decisions. They are generally appealable to Interior Board of Land Appeals.

**Implementation Plan:** A site-specific plan written to implement decisions made in a land use plan. An implementation plan usually selects and applies best management practices to meet land use plan objectives. Implementation plans are synonymous with “activity” plans. Examples of implementation plans include interdisciplinary management plans, habitat management plans, and allotment management plans.

**Indian tribe:** Any Indian group in the conterminous United States that the Secretary of the Interior recognizes as possessing tribal status.

**Indicator (Species):** A species of animal or plant whose presence is a fairly certain indication of a particular set of environmental conditions. Indicator species serve to show the effects of development actions on the environment.

**Indirect effects:** Secondary effects that occur in locations other than the initial action or later in time.

**Infiltration:** The downward entry of water into the soil or other material.

**Initial (fire) Attack:** An aggressive fire suppression action consistent with firefighter and public safety and values to be protected.

**Interdisciplinary Team:** A group of individuals with different training, representing the physical sciences, social sciences, and environmental design arts, assembled to solve a problem or perform a task. The members of the team proceed to a solution with frequent interaction so that each discipline may provide insights to any stage of the problem and disciplines may combine to provide new solutions. The number and disciplines of the members preparing the plan vary with circumstances. A member may represent one or more discipline or Bureau program interest.

**Interim Management Policy:** Policy that guides management of the BLMs Wilderness Study Areas. The policy balances the various uses of Wilderness Study Areas with the requirement to protect the lands wilderness values.

**Interior Board of Land Appeals:** The Department of the Interior, Office of Hearings and Appeals board that acts for the Secretary of the Interior in responding to appeals of decisions on the use and disposition of public lands and resources. Because the Interior Board of Land Appeals acts for and on behalf of the Secretary of the Interior, its decisions usually represent the Department's final decision but are subject to the courts.

**Intermittent Stream:** A stream which occasionally is dry or reduced to pool stage.

**Invasive Species:** Organisms that have been introduced into an environment where they did not evolve. Executive Order 13112 focuses on organism whose presence is likely to cause economic harm, environmental harm, or harms to human health.

**Inversion:** The state of the atmosphere in which a layer of cool air is trapped near the earth's surface by an overlying layer of warm air so that the lower layer cannot rise. Serious air pollution problems may result from air pollutants being emitted into the limited mixing depth below the inversion.

-J-

**Jurisdiction:** The legal right to control or regulate use of a transportation facility. Jurisdiction requires authority, but not necessarily ownership.

-K-

**Key Linkage Areas:** Key linkage areas provide landscape connectivity between blocks of lynx habitat. Linkage areas occur both within and between geographic areas where in-

tervening areas of non-lynx habitat such as basins, valleys, agricultural lands separate blocks of lynx habitat, or where lynx habitat naturally narrows between two blocks.

-L-

**Land Classification:** A process for determining the suitability of public lands for certain types of disposal or lease under the public land laws or for retention under multiple use management.

**Land Use Allocation:** The identification in a land use plan of the activities and foreseeable development that are allowed, restricted, or excluded for all or part of the planning area, based on desired future conditions.

**Land Use Plan:** A set of decisions that establish management direction for land within an administrative area, as prescribed under the planning provisions of FLPMA; an assimilation of land-use-plan-level decisions developed through the planning process, regardless of the scale at which the decisions were developed.

**Leasable Minerals:** Those minerals or materials designated as leasable under the Mineral Leasing Act of 1920. They include coal, phosphate, asphalt, sulphur, potassium, and sodium minerals, and oil, gas, and geothermal.

**Lease:** (1) A legal document that conveys to an operator the right to drill for oil and gas; (2) the tract of land, on which a lease has been obtained, where producing wells and production equipment are located.

**Lease Stipulation (oil and gas):** Conditions of lease issuance that provide protection for other resource values or land uses by establishing authority for substantial delay or site changes or the denial of operations within the terms of the lease contract. The authorized officer has the authority to relocate, control timing, and impose other mitigation measures under Section 6 of the Standard Lease Form. Lease stipulations clarify the Bureau's intent to protect know resources or resource values.

**Lessee:** A person or entity holding record title in a lease issued by the United States (see 43 CFR 3160.0-5).

**Lek:** An assembly area where birds, especially sage grouse, carry on display and courtship behavior.

**Limited Areas or Trails:** Designated areas or trails where the use of off-road vehicles is subject to restrictions, such as limiting the number or types or vehicles allowed, dates and times of use (seasonal restrictions), limiting use to existing roads and trails, or limiting use to designated roads and trails. Under the designated roads and trails designation, use would be allowed only on roads and trails that are

signed for use. Combinations of restrictions are possible, such as limiting use to certain types of vehicles during certain times of the year.

**Limits of Acceptable Change:** A framework for establishing acceptable and appropriate resource and social conditions in recreation settings. A system of management planning.

**Litter:** The uppermost layer of organic debris on the soil surface, essentially the freshly fallen or slightly decomposed vegetal material.

**Loamy:** Intermediate in texture and properties between fine- and coarse-textured soils.

**Locatable Minerals:** Minerals subject to exploration, development, and disposal by staking mining claims as authorized by the Mining Law of 1872, as amended. This includes deposits of gold, silver, and other uncommon minerals not subject to lease or sale.

**Lode:** A mineral deposit in solid rock.

**Lode Mining:** Mining of a mineral deposit in solid rock.

**Lynx Analysis Unit (LAU):** The LAU is a project analysis unit upon which direct, indirect, and cumulative effects analyses are performed. LAU boundaries should remain constant to facilitate planning and allow effective monitoring of habitat changes over time. An area of at least the size used by an individual lynx, about 25-50 square miles.

**Lynx Habitat:** Lynx occur in mesic coniferous forest that have cold, snowy winters and provide a prey base of snowshoe hare. In the Rocky Mountains primary vegetation that contributes to lynx habitat is lodgepole pine, subalpine fir, and Englemann spruce. Secondary vegetation that, when interspersed within subalpine forests, may also contribute to lynx habitat, includes cool, moist Douglas-fir, grand fir, western larch, and aspen forest. Dry forest types (ponderosa pine, climax lodgepole pine) do not provide lynx habitat. Primary elevations for lynx habitat are between 1500-2000 m. (4,920 – 6,560 ft.) elevation zones in the northern Rockies.

#### -M-

**Management Decision:** A decision made by the BLM to manage public lands. Management decisions include both land use plan decisions and implementation decisions.

**Management Framework Plan:** Planning decision document prepared before the effective date of the regulations implementing the land use planning provisions of the FLPMA, which establishes, for a given area of land, land-use alloca-

tions, coordination guidelines for multiple-use, and objectives to be achieved for each class of land use or protection.

**Management Opportunities:** A component of the analysis of the management situation; actions or management directions that could be taken to resolve issues or management concerns.

**Metalliferous:** Metallic minerals such as gold, silver, and lead.

**Metamorphic Rock:** Any rock derived from preexisting rocks by mineralogical, chemical, and structural changes, essentially in the solid state, in response to marked changes in temperature, pressure, shearing stress, and chemical environment at depth in the earth's crust.

**Mill:** A plant in which ore is treated for the recovery of valuable minerals or valuable minerals are concentrated into a smaller bulk for shipping to a smelter or other reduction works.

**Mill site (Millsite claim):** A site located on nonmineral land and used for erecting a mill or reduction works, or for other uses reasonably incident to support of a mine. Millsites are limited to 5 acres and may be located either by metes and bounds or by legal subdivision.

**Mine:** An opening or excavation in the earth for extracting minerals.

**Mineral:** Any solid or fluid inorganic substance that can be extracted from the earth for profit.

**Mineral Entry:** The filing of a claim on public land to obtain the right to any minerals it may contain.

**Mineral Estate:** The ownership of minerals, including rights necessary for access, exploration, development, mining, ore dressing, and transportation operations.

**Mineral Materials:** Materials such as common varieties of sand, stone, gravel, pumice, pumicite, and clay, that are not obtainable under the mining or leasing laws but that can be acquired under the Mineral Materials Act of 1947, as amended.

**Mineral Withdrawal:** A formal order that withholds federal lands and minerals from entry under the Mining Law of 1872 and closes the area to mineral location (staking mining claims) and development.

**Minimize:** To reduce the adverse impact of an operation to the lowest practical level.

**Mining Claim:** A parcel of land that a miner takes and holds for mining purposes, having acquired the right of possession by complying with the Mining Law and local laws and rules. A single mining claim may contain as many adjoining locations as the locator may make or buy. There are four categories of mining claims: lode, placer, millsite, and tunnel site.

**Mining District:** An area, usually designated by name, with described or understood boundaries, where minerals are found and mined under rules prescribed by the miners, consistent with the Mining Law of 1872.

**Mitigation Measures:** Methods or procedures that reduce or lessen the impacts of an action.

**Monitoring:** The periodic observation and orderly collection of data on 1) changing conditions of public land related to management actions and 2) the effects of implementing decisions.

**Modification:** A change in a Plan of Operations that requires some level of review by BLM because it exceeds what was described in the approved Plan of Operations.

**Modification (oil and gas):** A change to the provision of a lease stipulation either temporarily or for the term of the lease.

**Monitoring Plan:** the process of tracking the implementation of land use plan decisions.

**Multiple Use:** The management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the lands for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some lands for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long term needs of future generations for renewable and nonrenewable resources, including but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the lands and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or greatest unit output.

-N-

**National Ambient Air Quality Standards:** The allowable concentrations of air pollutants in the ambient (public out-

door) air. National ambient air quality standards are based on the air quality criteria and divided into primary standards (allowing an adequate margin of safety to protect the public health) and secondary standards (allowing an adequate margin of safety to protect the public welfare). Welfare is defined as including (but not limited to) effects on soils, water, crops, vegetation, human-made materials, animals, wildlife, weather, visibility, climate, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being.

**National Environmental Policy Act (NEPA) of 1969:** An Act that encourages productive and enjoyable harmony between man and his environment and promotes efforts to prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; enriches the understanding or the ecological systems and natural resources important to the Nation, and establishes the Council on Environmental Quality.

**National Landscape Conservation System:** A system of Congressional, Presidential, or other designated areas managed by the BLM, the components of which include National Monuments, National Conservation Areas, Wilderness Areas, Wilderness Study Areas, Wild and Scenic Rivers, National Historic Trails, National Scenic Trails, the California Desert Conservation Area, and the Headwaters Forest Reserve.

**National Register of Historic Places:** A register of districts, sites, buildings, structures, and objects, significant in American history, architecture, archaeology and culture, established by the "Historic Preservation Act" of 1966 and maintained by the Secretary of the Interior.

**National Wild and Scenic Rivers System:** A system of nationally designated rivers and their immediate environments that have outstanding scenic, recreational, geologic, fish and wildlife, historic, cultural, and other similar values and are preserved in a free-flowing condition. The system consists of three types of streams: (1) recreation—rivers or sections of rivers that are readily accessible by road or railroad and that may have some development along their shorelines and may have undergone some impoundments or diversion in the past, (2) scenic—rivers or sections of rivers free of impoundments with shorelines or watersheds still largely undeveloped but accessible in places by roads, and (3) wild—rivers or sections of rivers free of impoundments and generally inaccessible except by trails, with watersheds or shorelines essentially primitive and waters unpolluted.

**Neotropical Migratory Birds:** Birds that travel to Central America, South America, the Caribbean, and Mexico during the fall to spend the winter and then return to the United States and Canada during the spring to breed. These birds include almost half of the bird species that breed in the United States and Canada.

**No Surface Occupancy:** A fluid minerals leasing constraint that prohibits occupancy or disturbance on all or part of the lease surface to protect special values or uses. Lessees may exploit the fluid mineral resources under the leases restricted by this constraint through use of directional drilling from sites outside the area.

**Non-metalliferous:** Non-metallic minerals such as fluorspar, asbestos, and mica.

**Notice:** The notification a mining operator must submit to BLM of the intention to begin an operation that will disturb 5 acres or less a year within a mining claim or project area. The intent of a Notice is to permit operations with limited geographic disturbance to begin after a quick review for potential resource conflicts and to eliminate the need for federal action. A Notice requires no special forms, but an operator must submit specific information. BLM must complete its review of the Notice within 15 calendar days of its receipt unless more information is needed to determine if the operation would cause unnecessary or undue degradation.

**Noxious Weeds:** A plant species designated by Federal or State law as generally possessing one or more of the following characteristics: aggressive and difficult to manage; parasitic; a carrier or host of serious insects or disease; or nonnative, new, or not common to the United States.

**Nutrient Cycling:** The circulation of chemical elements such as nitrogen, oxygen, carbon, and phosphorus in specific pathways from the abiotic (not involving or produced by organisms) portions of the environment into organic substances in plants and animals and then back into abiotic forms.

-O-

**Objective:** A description of a desired condition for a resource. Objectives can be quantified and measured and, where possible, have established time frames for achievement.

**Open:** Generally denotes that an area is available for a particular use or uses. Refer to specific program definitions found in law, regulations, or policy guidance for application to individual programs.

**Obligate:** Essential, necessary, unable to exist in any other state, mode, or relationship.

**Off-Highway Vehicle (off-road vehicle):** Any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain, excluding: (1) Any nonamphibious registered motorboat; (2) Any military, fire, emergency, or law enforcement vehicle while

being used for emergency purposes; (3) Any vehicle whose use is expressly authorized by the authorized officer, or otherwise officially approved; (4) Vehicles in official use; and (5) Any combat or combat support vehicle when used in times of national defense emergencies.

**Open Areas and Trails:** Designated areas and trails where off-road vehicles may be operated, subject to operating regulations and vehicle standards or an area where all types of vehicle use is permitted at all times, subject to standards.

**Open Pit Mining:** A surface mining method in which overlying rock and soil are removed to expose an ore body, which is then drilled, blasted, and hauled from the pit.

**Operator:** Any person who has taken formal responsibility for the operations conducted on the leased lands.

**Ore:** A mineral deposit of high enough quality to be mined at a profit.

**Outstanding:** 1. Standing out among others of its kind; conspicuous; prominent; 2. superior to others of its kind; distinguished; excellent.

**Outstandingly Remarkable (River) Values:** Values among those listed in Section 1(b) of the Wild and Scenic Rivers Act are “scenic, recreational, geological, fish and wildlife, historical, cultural, or other similar values. . . .” Other similar values which may be considered include botanical, hydrological, paleontological, or scientific. Professional judgment is used to determine whether values exist to an outstandingly remarkable degree.

**Overstory:** The layer of foliage in a forest canopy.

-P-

**Paleontological Resources (Fossils):** The physical remains of plants and animals preserved in soils and sedimentary rock formations. Paleontological resources are important for understanding past environments, environmental change, and the evolution of life.

**Paleontology:** A science dealing with the life forms of past geological periods as known from fossil remains.

**Parent Material (Soil):** The unconsolidated more or less chemically weathered mineral or organic matter from which the upper level of the soil profile has developed.

**Patent:** The instrument by which the Federal Government conveys title to the public lands.

**Perennial Stream:** A stream that flows continuously during all seasons of the year.

**Permitted Use:** The forage allocated by, or under the guidance of, an applicable land use plan for livestock grazing in an allotment under a permit or lease. Expressed in AUMs.

**Permittee:** Holder of a valid permit that authorizes certain uses of the public lands (e.g., for grazing).

**Petroglyph:** A figure, design, or indentation carved, abraded, or pecked into a rock.

**pH:** A measure of acidity or hydrogen ion activity. Neutral is pH 7.0. All values below 7.0 are acidic, and all values above 7.0 are alkaline.

**Pictograph:** A figure or design painted onto a rock.

**Placer:** An alluvial deposit of sand and gravel containing valuable minerals such as gold.

**Placer Deposit:** A mass of gravel, sand, or similar material resulting from the crumbling and erosion of solid rocks containing particles of gold or other valuable minerals that have been derived from rocks or veins.

**Placer Mining:** A method of mining in which the overburden is removed to expose gold-bearing gravel deposits beneath. The gravel is then sluiced to separate the gold.

**Plan:** A document that contains a set of comprehensive, long range decisions concerning the use and management of Bureau administered resources in a specific geographic area.

**Planning Area:** A geographical area for which land use and resource management plans are developed and maintained.

**Planning Criteria:** The standards, rules, and other factors developed by managers and interdisciplinary teams for their use in forming judgments about decision making, analysis, and data collection during planning. Planning criteria streamline and simplify the resource management planning actions.

**Planning Decision (land use plan decision):** establishes desired outcomes and actions needed to achieve them. Decisions are reached using the BLM planning process. When they are presented to the public as proposed decisions, they can be protested to the BLM Director. They are not appealable to Interior Board of Land Appeals.

**Pleistocene Megafauna:** Large mammals that inhabited North America before the end of the last glaciation and that became extinct. Such animals include the mammoth, mastodon, camel, giant sloth, *Bison antiquus*, and *Bison occidentalis*.

**Population:** Within a species, a distinct group of individuals that tend to mate only with members of the group. Because of generations of inbreeding, members of a population tend to have similar genetic characteristics.

**Potential Natural Vegetation:** The vegetation that would become established if all successional sequences were completed without interferences by man under the present environmental conditions.

**Precambrian:** Pertaining to the earliest era of geological history, extending from 4.5 billion to 540 million years ago and encompassing 7/8 of the earth's history. Just before the end of the Precambrian, complex multicellular organisms, including animals, evolved.

**Precious Metal:** A general term for gold, silver, or any of the minerals of the platinum group.

**Pre-commercial thinning:** A thinning that does not yield trees of commercial value, usually designed to reduce stocking in order to concentrate growth on the more desirable trees.

**Prehistoric:** Refers to the period wherein Native American cultural activities took place which were not yet influenced by contact with historic nonnative culture(s).

**Prescribed Fire:** The introduction of fire to an area under regulated conditions for specific management purposes.

**Prevention of Significant Deterioration:** A regulatory program based not on the absolute levels of pollution allowable in the atmosphere but on the amount by which a legally defined baseline condition will be allowed to deteriorate in a given area. Under this program, geographic areas are divided into three classes, each allowing different increases in nitrogen dioxide, particulate matter, and sulfur dioxide concentrations.

**Prey Base:** Populations and types of prey species available to predators.

**Primitive and Unconfined Recreation:** Non-motorized, non-mechanized and undeveloped types of recreational activities.

**Project Plan:** Detailed survey and design plan.

**Project Area:** The area of land upon which an operator conducts mining operations, including the area needed for building or maintaining of roads, transmission lines, pipelines, or other means of access.

**Protest:** Application for review by a higher administrative level.

**Public Land:** Land or interest in land owned by the United States and administered by the Secretary of the Interior through the BLM, except lands located on the Outer Continental Shelf, and land held for the benefit of Indians, Aleuts, and Eskimos.

## -Q-

**Quarry:** An open or surface working, usually for the extraction of stone, slate, limestone, etc.

**Quarry Site:** Place where minerals occur which were a source of raw material for prehistoric/historic industries.

## -R-

**Rangeland:** Land used for grazing by livestock and big game animals on which vegetation is dominated by grasses, grass-like plants, forbs, or shrubs.

**Raptor:** Bird of prey with sharp talons and strongly curved beaks such as hawks, owls, vultures, and eagles.

**Reasonably Foreseeable Development Scenario:** The prediction of the type and amount of oil and gas activity that would occur in a given area. The prediction is based on geologic factors, past history of drilling, projected demand for oil and gas, and industry interest.

**Reclamation:** The process of converting disturbed land to its former use or other productive uses.

**Record of Decision:** A document signed by a responsible official recording a decision that was preceded by the preparing of an environmental impact statement.

**Relict:** A remnant or fragment of the vegetation of an area that remains from a former period when the vegetation was more widely distributed.

**Reserves (mineral):** Known mineral deposits that are recoverable under present conditions but are as yet undeveloped.

**Reservoir (oil and gas):** A naturally occurring, underground container of oil and gas, usually formed by deformation of strata and changes in porosity.

**Resource Advisory Council:** A council established by the Secretary of the Interior to provide advice or recommendations to BLM management.

**Resource Management Plan:** A land use plan as prescribed by the Federal Land Policy and Management Act which establishes, for a given area of land, land-use allocations, coordination guidelines for multiple-use, objectives and actions to be achieved.

**Resource Reserve Allotment:** A unit of public land that will not have term grazing permits issued. Such an allotment would only be grazed on a temporary nonrenewable basis. The use of these allotments would be to provide temporary grazing to rest other areas following wildfire, habitat treatments, or to allow for more rapid attainment of rangeland health. The allotment must be of sufficient size to be managed as a discrete unit. Resource Reserve Allotments should be distributed throughout the planning area.

**Retort:** A vessel used for the distillation of volatile materials.

**Revision:** The process of completely rewriting the land use plan due to changes in the planning area affecting major portions of the plan or the entire plan.

**Right-of-way:** A permit or an easement which authorizes the use of public lands for certain specified purposes, commonly for pipelines, roads, telephone lines, electric lines, reservoirs, etc.; also, the lands covered by such an easement or permit.

**Right-of-way Corridor:** A parcel of land that has been identified by law, Secretarial order, through a land use plan or by other management decision as being the preferred location for existing and future right-of-way grants and suitable to accommodate one type of right-of-way or one or more rights-of-way which are similar, identical or compatible.

**Riparian Area:** A form of wetland transition between permanently saturated wetlands and upland areas. Riparian areas exhibit vegetation or physical characteristics that reflect the influence of permanent surface or subsurface water. Typical riparian areas include lands along, adjacent to, or contiguous with perennially and intermittently flowing rivers and streams, glacial potholes, and the shores of lakes and reservoirs with stable water levels. Excluded are ephemeral streams or washes that lack vegetation and dependent on free water in the soil.

**River Designation:** The process whereby rivers are added to the National Wild and Scenic Rivers System by an act of Congress or by administrative action of the Secretary of the Interior with regard to state-designated rivers under Section 2(a)(ii) of the Wild and Scenic Rivers Act.

**Roadless:** Refers to the absence of roads which have been improved and maintained by mechanical means to insure relatively regular and continuous use. A way maintained solely by the passage of vehicles does not constitute a road.

**Rock Art:** Petroglyphs or pictographs.

**Runoff:** The water that flows on the land surface from an area in response to rainfall or snowmelt.

## -S-

**Saleable Minerals:** Common variety minerals on the public lands, such as sand and gravel, which are used mainly for construction and are disposed of by sales or special permits to local governments.

**Saline:** Containing high concentrations of salt.

**Salmonid:** Any fish of the Salmonidae family, including salmon and trout.

**Scale:** Refers to the geographic area and data resolution under examination in an assessment or planning effort.

**Scenic Quality:** The degree of harmony, contrast and variety within a landscape.

**Scenic River:** A river or section of a river that is free of impoundments and whose shorelines are largely undeveloped but accessible in places by roads.

**Scoping:** The process of identifying the range of issues, management concerns, preliminary alternatives, and other components of an environmental impact statement or land-use planning document. It involves both internal and public viewpoints.

**Seasonal Restriction:** A fluid minerals leasing constraint that prohibits surface use during specified time periods to protect identified resource values. The constraint does not apply to the operation and maintenance of production facilities unless analysis demonstrates that such constraints are needed and that less stringent, project-specific constraints would be insufficient.

**Section 7 Consultation:** The requirement of Section 7 of the Endangered Species Act that all federal agencies consult with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service if a proposed action might affect a federally listed species or its critical habitat.

**Section 106 Compliance:** The requirement of Section 106 of the National Historic Preservation Act that any project funded, licensed, permitted, or assisted by the Federal Government be reviewed for impacts to significant historic properties and that the State Historic Preservation Officer and the Advisory Council on Historic Preservation be allowed to comment on a project.

**Sediment Yield:** The amount of sediment produced in a watershed, expressed in tons, acre feet, or cubic yards, of sediment per unit of drainage area per year.

**Sediment:** Soil, rock particles and organic or other debris carried from one place to another by wind, water or gravity.

**Sedimentary Rock:** Rock resulting from consolidation of loose sediment that has accumulated in layers.

**Sedimentation:** The process or action of depositing sediment.

**Segregation:** Any act such as a withdrawal or exchange that suspends the operation of the public land laws.

**Sensitive Species:** All species that are under status review, have small or declining populations, live in unique habitats, or need special management. Sensitive species include threatened, endangered, and proposed species as classified by the Fish and Wildlife Service and National Marine Fisheries Service.

**Seral:** Pertaining to the successional stages of biotic communities.

**Shaft:** A vertical or inclined opening to an underground mine.

**Shrub:** A low, woody plant, usually with several stems, that may provide food and/or cover for animals.

**Significant:** An effect that is analyzed in the context of the proposed action to determine the degree or magnitude of importance of the effect, either beneficial or adverse. The degree of significance can be related to other actions with individually insignificant but cumulatively significant impacts.

**Slash:** The branches, bark, tops, cull logs and broken or uprooted trees left on the ground after logging.

**Slope:** The degree of deviation of a surface from the horizontal.

**Sluiced:** Refers to a mining method that uses a long, inclined trough or launder containing in its bottom, riffles that provide a lodging place for heavy minerals in ore concentration. The material to be concentrated is carried down through the sluices on a current of water. Sluice boxes are widely used in placer operations for concentrating such minerals as gold and platinum from stream gravels.

**Social Science:** The study of society and of individual relationships in and to society, generally including one or more of the academic disciplines of sociology, economics, political science, geography, history, anthropology, and psychology.

**Soil Productivity:** The capacity of a soil to produce a plant or sequence of plants under a system of management.

**Soil Texture:** The relative proportions of the three size groups of soil grains (sand, silt, and clay) in a mass of soil.

**Solitude:** (1) the state of being alone or remote from others; isolation; (2) a lonely or secluded place.

**Source Water Delineation and Assessment Reports:** Major component of the Montana Source Water Protection Plan defining Source Water Protection Areas. The reports attempt to delineate an inventory zone whose size and areal extent are determined by the type of water source, susceptibility to contamination, and characteristics of the aquifer, including flow characteristics of the groundwater.

**Source Water Protection Plan:** A management plan, usually developed by local communities, that addresses public water system concerns based on information contained within Source Water Delineation and Assessment Reports.

**Spawning Gravels:** Stream-bottom gravels where fish deposit and fertilize their eggs. The covering of these gravels with silt can block the supply of oxygen to the eggs or serve as a cementing agent to prevent fry from emerging.

**Special Recreation Management Area:** Areas which require explicit recreation management to achieve recreation objectives and provide specific recreation opportunities.

**Special Status Species:** Includes proposed species, listed species, and candidate species under the ESA; State-listed species; and BLM State Director-designated sensitive species (see BLM Manual 6840 - Special Status Species Policy).

**Species Diversity:** The number, different kinds of, and relative abundances of species present in a given area.

**Standard:** A description of the physical and biological conditions or degree of function required for healthy, sustainable lands (e.g., land health standards).

**Stipulations:** Requirements that are part of the terms of a mineral lease. Some stipulations are standard on all Federal leases. Other stipulations may be applied to the lease at the discretion of the surface management agency to protect valuable surface resources and uses.

**Strategic Plan:** A plan that establishes the overall direction for the BLM. This plan is guided by the requirements of the Government Performance and Results Act of 1993, covers a 5-year period, and is updated every 3 years. It is consistent with FLPMA and other laws affecting the public lands.

**Stratigraphy:** The arrangement of strata, especially as to geographic position and chronologic order of sequence.

**Stream Reach:** A specified length of a stream or channel.

**Structure (Stream Channel):** Any object, usually large, in a stream channel that controls water movement.

**Structure (of forest vegetation):** The horizontal and vertical distribution of plants in a stand, including height, diameter, crown layers, and stems of trees, shrubs, herbaceous understory, snags and coarse woody debris.

**Substrate:** The mineral or organic material that forms the bed of a stream; the base upon which an organism lives; the surface on which a plant or animal grows or is attached.

**Substrate Embeddedness:** An estimate of the surface area of the large substrate types that are covered with fine substrate particles (< 2mm diameter).

**Sustainability:** The ability of an ecosystem to maintain ecological processes and functions, biological diversity, and productivity over time.

**Sustained Yield:** Maintenance of an annual or regular periodic output of a renewable resource from public land consistent with the principles of multiple use.

-T-

**Tailings:** The waste matter from ore after the extraction of economically recoverable metals and minerals.

**Take:** As defined by the Endangered Species Act, "to harass, harm, pursue, hunt, shoot, wound, kill, capture, or collect, or attempt to engage in any such conduct."

**Terms and Conditions:** Measures contained in livestock grazing permits and leases, which are determined by the authorized officer to be appropriate to achieve management and resource condition objectives for the public lands and other lands administered by the BLM, and to ensure conformance with Fundamentals of rangeland health and Standards and guidelines for grazing administration.

**Terrestrial Species:** Ground-dwelling plants and animals.

**Thermal Cover:** Vegetation or topography that prevents radiational heat loss, reduces wind chill during cold weather, and intercepts solar radiation during warm weather.

**Threatened Species:** Any plant or animal species defined under the Endangered Species Act as likely to become endangered within the foreseeable future throughout all or a significant portion of its range; listings are published in the Federal Register.

**Thrust Fault:** A reverse fault that is characterized by a low angle of inclination with reference to a horizontal plane.

**Timber Database:** Commercial forestland judged to be environmentally and economically suitable and available for the continuous production of timber; the land from which the allowable cut is calculated and harvested.

**Tools:** Something that helps to accomplish the stated goal or action for a resource/resource use or program. Tools include: timing, duration of grazing, forage utilization, grazing rotation, deferment of grazing, stubble height, bank alteration, and structural features.

**Total Maximum Daily Load:** An estimate of the total quantity of pollutants (from all sources: point, nonpoint, and natural) that may be allowed into waters without exceeding applicable water quality criteria.

**Traditional Lifeway Values:** Values that are important for maintaining a group's traditional system of religious belief, cultural practice, or social interaction. A group's shared traditional lifeway values are abstract, nonmaterial, ascribed ideas that cannot be discovered except through discussions with members of the group. These values may or may not be closely associated with definite locations. Traditional lifeway values sometimes imbue cultural resources with significance. They can be identified through consultation and considered through public participation during planning and environmental review. The BLM does not manage people's values, beliefs, or social systems.

**Tundra:** Treeless arctic and alpine areas where cover may consist of bare ground, grasses, sedges, forbs, dwarf shrubs, mosses, or lichens.

-U-

**Ungulates:** Hoofed animals, including ruminants but also horses, tapirs, elephants, rhinoceroses, and swine.

**Uplands:** Lands at higher elevations than alluvial plains or low stream terraces; all lands outside the riparian-wetland and aquatic zones.

**User Day:** Any calendar day, or portion thereof, for each individual accompanied or serviced by an operator or permittee on the public lands or related waters; synonymous with passenger day or participant day.

**Utilization (rangeland):** The proportion of the current year's forage production that is consumed or destroyed by grazing animals. Utilization is usually expressed as a percentage.

-V-

**Valid Existing Rights:** Locatable mineral development rights that existed when the Federal Land Policy and Management Act was enacted on October 21, 1976. Some areas are segregated from entry and location under the Mining Law to protect certain values or allow certain uses. Mining claims that existed as of the effective date of the segregation may still be valid if they can meet the test of discovery of a valuable mineral required under the Mining Law. Determining the validity of mining claims located in segregated lands

requires BLM to conduct a validity examination and is called a "valid existing rights" determination.

**Vegetation Community:** An assemblage of plant populations in a common spatial arrangement.

**Vegetation Manipulation:** Alteration of vegetation by using fire, plowing, or other means.

**Vegetation Type:** A plant community with distinguishable characteristics described by the dominant vegetation present.

**Vein:** A well-defined, typically tabular zone or belt of mineral-bearing rock confined between nonmineralized rock.

**Viable:** Capable of sustaining a healthy and reproducing population over a long period of time.

**Visual Resources:** The visible physical features of a landscape (topography, water, vegetation, animals, structures, and other features) that constitute the scenery of an area.

-W-

**Waiver (oil and gas):** A permanent exemption to a lease stipulation.

**Waste Rock:** Barren rock at a mine or material that is too low in grade to be of economic value.

**Water Quality:** The chemical, physical, and biological characteristics of water with respect to its suitability for a particular use.

**Water Quality Restoration Plans:** A comprehensive plan developed in conjunction with MTDEQ, local watershed groups, and numerous agencies and entities to address and establish water quality goals, Total Maximum Daily Loads, restoration strategies, and monitoring.

**Water Table:** The surface in a groundwater body where the water pressure is atmospheric. It is the level at which water stands in a well that penetrates the water body just far enough to hold standing water.

**Watershed:** A geomorphic area of land and water within the confines of a drainage divide. The total area above a given point on a stream that contributes flow at that point.

**Wetlands:** Areas that are inundated or saturated by surface or ground water often and long enough to support and under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions.

**Wild Horses and Burros:** All unbranded and unclaimed horses and burros using public lands as all or part of their habitat.

**Wild, Scenic or Recreational River:** The three classes of what is traditionally referred to as a “Wild and Scenic River.” Designated river segments are classified as wild, scenic and/or recreational, but the segments cannot overlap.

**Wild and Scenic Study River:** Rivers identified in Section 5 of the Wild and Scenic Rivers Act for study as potential additions to the National Wild and Scenic Rivers System. The rivers shall be studied under the provisions of Section 4 of the Wild and Scenic Rivers Act.

**Wild River:** Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

**Wildcat, or Exploration, Well:** A well drilled in the area where there is no oil or gas production.

**Wilderness Characteristics:** Key characteristics of a wilderness listed in section 2(c) of the “Wilderness Act” of 1964 and used by BLM in its wilderness inventory. These characteristics include size, naturalness, outstanding opportunities for solitude, outstanding opportunities for primitive and unconfined type of recreation, and special features.

**Wilderness Study Area:** A designation made through the land use planning process of a roadless area found to have wilderness characteristics as described in Section 2 (c) of the Wilderness Act of 1964.

**Wilderness:** A congressionally designated area of undeveloped federal land retaining its primeval character and influence, without permanent improvements or human habitation, that is protected and managed to preserve its natural

conditions and that (1) generally appears to have been affected mainly by the forces of nature, with human imprints substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least 5,000 acres or is large enough to make practical its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historic value.

**Wildfire:** Any unwanted wildland fire.

**Wildland Fire:** Any nonstructure fire, other than prescribed fire, that occurs in the wildland.

**Wildland Fire Situation Analysis:** A decision-making process that evaluates alternative management strategies against selected safety, environmental, social, economical, political, and resource management objectives as selection criteria.

**Wildland Urban Interface (WUI):** The line, area or zone where structures and other human developments meet or intermingle with undeveloped wildland or vegetative fuels.

**Winter Range:** Range that is grazed during winter.

**Withdrawal:** An action that restricts the use of public lands by removing them from the operation of some or all of the public land or mining laws.

**Woodland:** A forest community occupied primarily by non-commercial species such as juniper, mountain mahogany, or quaking aspen groves; all western juniper forest lands are classified as woodlands, since juniper is classified as a noncommercial species.